

T 49
.J7
Copy 1

JOHNSON'S FACT BOOK



SHORT CUTS TO EFFICIENCY

*Illustrated and
containing over* **300**

ARTICLES OF

GENERAL INFORMATION

A Book Worth \$10 for 10c

CALENDAR-1916

JANUARY.							JULY.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	..	1	..	..	..	..	..	..	1
2	3	4	5	6	7	8	2	3	4	5	6	7	8
9	10	11	12	13	14	15	9	10	11	12	13	14	15
16	17	18	19	20	21	22	16	17	18	19	20	21	22
23	24	25	26	27	28	29	23	24	25	26	27	28	29
30	31	..	..	..	..	..	30	31	..	..	..	..	..

FEBRUARY.							AUGUST.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	1	2	3	4	5
6	7	8	9	10	11	12	6	7	8	9	10	11	12
13	14	15	16	17	18	19	13	14	15	16	17	18	19
20	21	22	23	24	25	26	20	21	22	23	24	25	26
27	28	29	..	..	..	..	27	28	29	30	31	..	..
..

MARCH.							SEPTEMBER.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	1	2	3	4	..	..	..	..	..	1	2
5	6	7	8	9	10	11	3	4	5	6	7	8	9
12	13	14	15	16	17	18	10	11	12	13	14	15	16
19	20	21	22	23	24	25	17	18	19	20	21	22	23
26	27	28	29	30	31	..	24	25	26	27	28	29	30
..

APRIL.							OCTOBER.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	..	1	..	1	2	3	4	5	6
2	3	4	5	6	7	8	8	9	10	11	12	13	14
9	10	11	12	13	14	15	15	16	17	18	19	20	21
16	17	18	19	20	21	22	22	23	24	25	26	27	28
23	24	25	26	27	28	29	29	30	31	..	..	..	..
30	..	..	..	..	..	..	..	..	..	..	..	..	..

MAY.							NOVEMBER.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	1	2	3	4	5	6	..	..	..	1	2	3	4
7	8	9	10	11	12	13	5	6	7	8	9	10	11
14	15	16	17	18	19	20	12	13	14	15	16	17	18
21	22	23	24	25	26	27	19	20	21	22	23	24	25
28	29	30	31	..	..	..	26	27	28	29	30	..	..
..

JUNE.							DECEMBER.						
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	1	2
4	5	6	7	8	9	10	3	4	5	6	7	8	9
11	12	13	14	15	16	17	10	11	12	13	14	15	16
18	19	20	21	22	23	24	17	18	19	20	21	22	23
25	26	27	28	29	30	..	24	25	26	27	28	29	30
..	..	..	..	..	..	..	31	..	..	..	..	..	..

JOHNSON'S FACT BOOK

ILLUSTRATED

A Compilation of
Short Cuts
For Saving Labor.

***PRACTICAL SUGGESTIONS FOR PEOPLE
IN ALL WALKS OF LIFE.***

Published by
THE T. G. JOHNSON COMPANY
ATLANTA, GEORGIA

T49
J7

Copyright 1915
By THE T. G. JOHNSON CO.,
ATLANTA, GA.

\$0.10

FEB -7 1916

© J. A. 420689

no. 1.

P R E F A C E

In writing and compiling this book we have exerted every effort to make it plain, brief and right to the point, so that any one can easily understand every portion of it.

In all departments of business there are handy ways of doing things, which are quicker than the usual way; things that are practiced by the few and unknown to the many.

In this book one will find many practical suggestions that can be brought into daily use, thereby saving both time and money.

It is our earnest desire that you will find its value ample justification for its preservation.

THE PUBLISHERS.

NOTE—Complete Index in back of the book.

HOUSEHOLD HINTS AND APPLIANCES

To Cure a Smoking Chimney.



A smoking chimney may be remedied by knocking out half a brick on each of its four sides, about one foot from the top.

Medicine Stains on Silver.

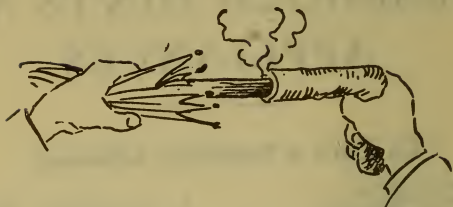
Medicine stains on silver spoons and silverware may be removed by rubbing with a rag dipped in sulphuric acid and washing with soapsuds.

Home-Made Fruit Jar Opener.

Take a common leather strap with a buckle. Pull it tight on the cover and buckel the strap as shown in cut.



To Mend an Umbrella.



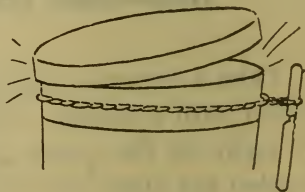
An umbrella with a steel rod that is loose in the handle may be mended by filling the hole in the handle with powdered rosin and inserting into it the end of the rod heated sufficiently to melt the rosin. It will stay as well as if mended by an expert, who would mend it the same way.

Making Coffee.

Add a pinch of common table salt, as it will improve it greatly.

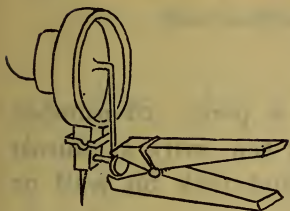
Home-Made Can Opener.

We all know how difficult it is at times to remove a tight fitting cover on a lard can. Try this. Place a heavy cord around the can just below



the cover, placing nail as shown in cut and twist and your cover will come off easily.

To Soften the Tone of a Talking Machine.



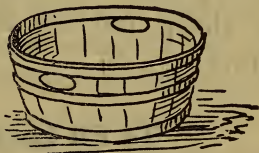
Use a common old clothes pin on the set screw as shown in cut. Try it and note the difference.

Cutting Loaf Bread.

Cut through the center, then cut slices from the center toward the ends. The two cut surfaces can be placed together, excluding the air and keeps the bread fresh.

Home-Made Bushel Measure.

Take a lime or cement barrel, measure $12\frac{1}{2}$ inches up from the bottom and saw off. Place one hoop at top on outside and one in inside. Nail with $1\frac{1}{2}$ inch nails and clinch. Place another hoop $2\frac{1}{2}$ inches from top down on outside and clinch. Cut two holes, one on each side, for hand holds. Now you have a measure that will hold one bushel of potatoes level full.



A Homemade Broom Holder



Bend a piece of number eight or ten wire as shown in cut and tack on wall or door.

Removing Grease from Paint.

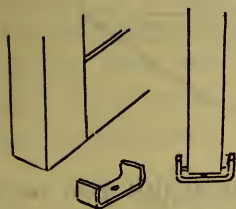
A good and cheaply applied method is to rub the painted surface with a paste of ordinary whiting. This is allowed to dry and when it is rubbed off with a cloth the dirt and grease is taken away with it. Whiting is cheap and can be purchased at any drug store.

To Fit Large Cork in Bottle.



If you have not a cork small enough to fit the bottle, a very good substitute can be made in the following manner; slit with pocket knife as shown in cut.

Home-Made Door Stop.



Take a piece of common hoop iron and bend as shown in cut.

Moldy Substances in Rooms.

It has long been known that the presence of mold in rooms is highly injurious to human health; under certain conditions of dampness and bad ventilation, it is no uncommon thing to see mildew run all over a large expanse of white-washed wall or ceiling. If this mold occur in a living room, and it be not destroyed, it frequently brings on a complication of painful symptoms in the human patient, or, in other words, the membranes and tissues of the body are known to offer a fitting habitat for the plant, and it is transferred from the original objects to the human frame. A weak solution of hydrochloride of lime (bleaching powder) has been recommended as a destroyer of mold in rooms, and as the growth is both common and rapid in damp and ill-ventilated situations, the remedy is worth a trial.

Home-Made Buttonhole Cutter.



Take a piece of wood the width you want button holes made, lay the cloth over it, and cut with sharp knife. You will find that it will cut the cloth neater than with a pair of scissors.

To Dry Rubber Boots.

Place a small bag of common table salt in each boot at night and you will find that by morning it will have absorbed all the moisture. Take the bags out and place them near the kitchen stove and they will soon dry out and be in readiness for the next time.

To Remove Paint from Wood.

Half a cup of washing soda dissolved in a pint of water makes a very strong lye that will remove paint or varnish with a little scrubbing. The cleaned surface should be very thoroughly rinsed and dried before being repainted or varnished.

Removing Screws.

Where a screw is so fast that it is not easily moved by a screw driver, it may be loosened by putting a red hot iron on the end of the screw, thus heating it very hot. The expansion is so much under the heat that when it cools the screw will be easily removed.

Another Fruit Jar Opener.



Take a small leather strap and screw same to an old broom handle, making strap the proper size to accommodate the cover.

To Keep Watermelons Until Christmas.

Cut them from the vine before they are fully ripe, leaving a six or eight inch stem. Bury them in dry sand out of the way of frost and you will have watermelons for Christmas.

Stoves—To Mend Cracks In.

Take equal parts of wood ashes and common salt, and mix them to a proper consistency with water; with this fill the cracks.

Easy Way to Clean a Gun.

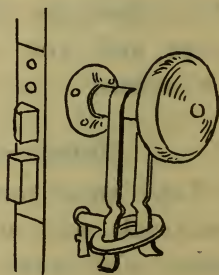
Wipe out your gun with a rag that is soaked with mercurial ointment. It will not only prevent the rusting of same, but will loosen whatever lead there may be in the barrels.

Bending Sewing Needles.

Sometimes a needle is wanted for sewing shoes or harness. A straight needle may be bent by taking the temper out of it by heating it in a gas or lamp flame. After it is bent into the shape desired, the temper may be restored by again heating and placing it while hot in a bath of water or oil.

Home-Made Burglar Proof Lock.

To prevent a burglar from turning the key with his plyers, bend a heavy piece of metal in the shape of a hair pin like the cut shown.



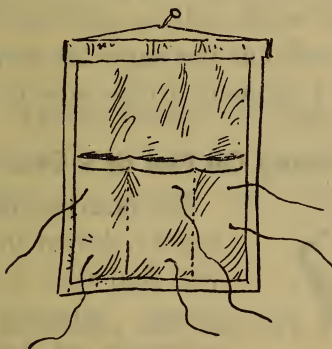
Removing Old Wallpaper.

Make a thick paste of flour and add little salt to boiling water. Then add a few ounces of acetic acid. Apply all over the surface that is to be removed with a brush of some kind. After a few minutes you will find the paper will come off without any trouble.

To Make Tough Steak Tender.

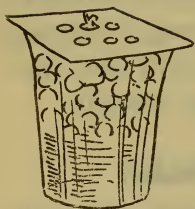
Slice the steak the night before and rub over a small quantity of common cooking soda.

Home-Made Pockets for Spools.



Made out of any kind of heavy cloth, and with as many pockets for thread as may be desired. Easy to make and inexpensive.

Home-Made Fly Trap.

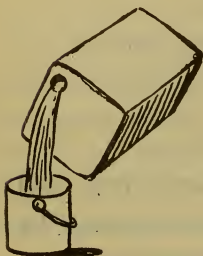


Fill glass two-thirds full of strong soap suds, with as much froth as possible. Take a piece of pasteboard large enough to cover the glass and punch four holes in center of board. Spread molasses on under side of paste board as per cut shown.

How to Sew Thin Fabrics.

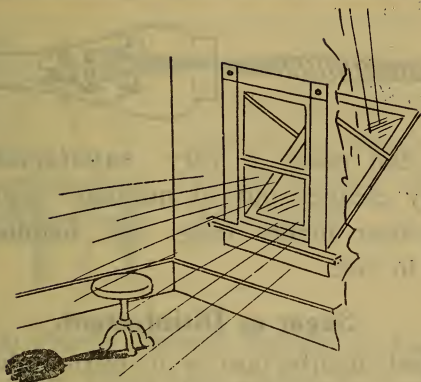
If a paper is laid upon the machine and the stitching done through the goods and through the paper the work will be perfect. The machine needle will cut the paper so it will be the work of but a moment to remove it.

Pouring Oil Out of a Can.



By pouring out of the top as shown in cut, you will find that it will flow freely, eliminating the necessity of having two holes in can. Try this and note the improvement over the old way.

Reflectors for Dark Room.



Swing mirror on outside of window as shown in cut, and note the difference in the light of the room.

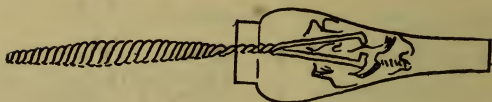
Taking Scales Off Fish.

Drop the fish in boiling water for a few minutes and the scales will come off very easily.

Mold in Books and Ink—To Prevent.

A few drops of lavender will save a library from mold; a single drop will save a pint of ink. A little salt or white wine will also preserve ink from mold.

Home-Made Chimney Cleaner.



You can make a very satisfactory lamp chimney cleaner out of number eight wire, twenty-four inches long by bending it as shown in cut.

Sugar as Disinfectant.

A good disinfectant is to burn light brown sugar, about a half handful or less, in a room or house where bad odors are, and it will quickly dispel them.

Trapping Bumble Bees.

Take a 1-gallon jug and fill half full of water, leaving out the cork; set near nest. Throw stones or clods of dirt at the nest till the bees come out around the jug, and see how quickly a whole colony will crawl into the jug and get drowned. Set the jug near entrance or door.

To Prevent Eggs Sticking.

Eggs will not sink to the bottom of the pan and stick when poaching, if the pan or other vessel is greased before pouring in the water.

Home-Made Swing Made of Common Chair.



Use one half inch rope and tie as shown in cut. Makes a nice porch or lawn swing.

To Purify Rancid Butter or Lard.

Take two large Irish potatoes to each five or six pounds of butter or lard; peel and slice very thin. Put the kettle on the stove, add the potatoes and cook until it is thoroughly done, strain through cheese-cloth while hot.

To Keep Glasses On.

Noseglasses can be held firmly to the nose by the use of powdered rosin. The heat will make the glasses stick so no ordinary wind will dislodge them.

Keeping Flies Off Hams.

Flies may be kept off of hams that are being smoked by using pyroligenous acid. Paint the joints and parts not covered with skin with the acid.

How to Keep Part of a Watermelon.

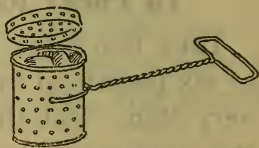
Turn the cut part down, then the water that is free will run out and not remain to help sour the remainder of the melon.

To Keep Mice Away.

Lumps of gum camphor placed in drawers and cupboards will keep mice away.

A Soap Shake.

Use a baking powder can. Punch holes in the can with an ice pick or some other sharp pointed tool, and attach a large wire to the center, twisting the ends to form a handle.



Regarding Gelatine.

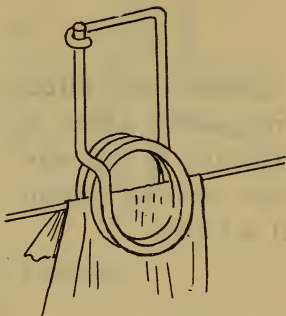
When set away to cool, be sure and cover with a plate as it is the best known germ catcher there is, being used in laboratories and hospitals to gather bacteria.

To Remove the Odor of Onions, Garlic or Red Pepper.

Wash hands thoroughly with cold water, using teaspoonful of dry mustard. Never use soap.

Home-Made Clothespin.

Take a common piece of number eight galvanized wire and bend it around a broom handle, as per cut.



Bleaching Ivory.

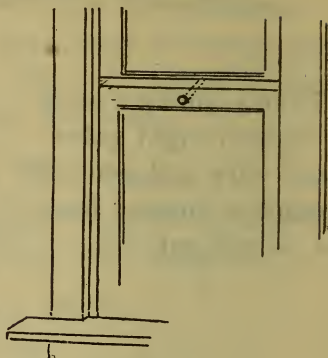
A good way to bleach ivory ornaments is to rub on a solution made of a small quantity of unslaked lime, bran and water. The mixture should be wiped off after the ivory has become bleached, and the surface rubbed with magnesia, which gives it a brilliant polish.

Removing Paint from Glass.

Paint may be easily cleaned from glass by using a 50-per-cent solution of acetic acid. Acid should be heated and applied with a cloth. The hot acid will not hurt the hands nor the glass, but should be kept from children who might drink of it.

Home-Made Window Lock.

Simple and effective lock which is attached to the window sash by means of a screw.



Preserving Canvas Gloves.

The life of a pair of canvas gloves may be tripled by coating the palms with soft rosin and allowing it to thoroughly dry. Axle grease is said to be quite as good as the rosin.

To Prevent Lamps from Smoking.

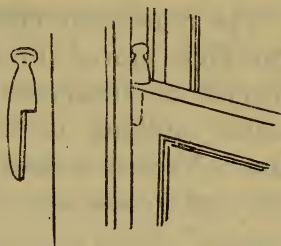
Soak the lamp wick in strong vinegar and dry thoroughly before using. It will then burn freely and give much satisfaction for the trouble taken.

Homemade Fly Paper.

Take pint each of castor oil and molasses and add one pound of rosin (beat the rosin up fine) and boil in double boiler for two hours. Spread same with brush on paper.

Home-Made Anti-Rattler for Window.

Break one prong of a common clothes pin. Easy thing to do and will overcome the trouble.



To Waterproof Canvas.

Stretch the canvas to be waterproofed on a frame, after thoroughly washing to free it from starch and dirt. Then paint it with a composition of 4 pounds of white lead, 1 pint of turpentine, $\frac{1}{2}$ ounce white vitriol, and $\frac{1}{2}$ ounce of sugar of lead. Thin this mixture to proper consistency with boiled oil and apply to cloth with a paint brush. Cloth to be waterproofed must be carefully stretched and thoroughly dried before applying the mixture.

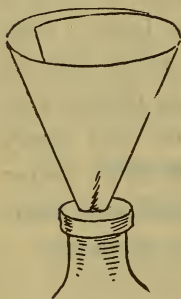
Filling for Pin Cushions.

Coarse coffee grounds, washed and thoroughly dried, make an ideal filling for pin cushions. They do not absorb moisture, and pins and needles will not rust if stuck in such a cushion.

A Novel Mouse Trap.

The round hole mouse-trap, to be had at all the dime stores for five cents, is not only a marvel of cheapness, but baited regularly leaves nothing to be desired for efficiency. But a Yankee school marm, too busy to visit the store, inverted a tumbler over a "Uneda biscuit," tilted the side with her thimble, and enjoyed much satisfaction when she found her enemy a prisoner on her window sill the next morning.

Paper Funnel.



Bottles having small necks are hard to fill without spilling the liquid. Here is a simple funnel made out of a small piece of writing paper.

Cement Made Waterproof.

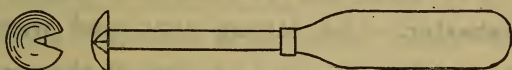
Cement work, consisting of 1 part cement and 3 parts sand, can be made waterproof after the work has set by applying as much kerosene oil to the surface as they will absorb.

Fruit Spots from Cotton.—Apply cold soap, then touch the spot with a hair pencil or feather dipped in chlorate of soda, then dip immediately in cold water.

Grease from Silks.—Take a lump of magnesia, rub it wet on the spot, let it dry, then brush the powder off.

Iron Rust may be removed from white goods by sour milk.

Home-Made Tack Puller.



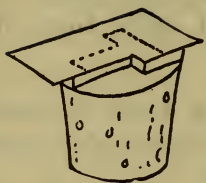
Take a round headed bolt and file a V shape notch in it and screw the bolt into any old wooden handle, and you will not only have a very durable tack puller, but the best that is made.

Scorch Stains from White Linen.—Lay in bright sun.

Mildew.—Moisten the spot with clean water; rub on it a thick coating of castile soap mixed with chalk scrapings; rub with end of finger; then wash off.

Furniture for Finger Marks.—Rub with a soft rag and sweet oil.

Home-Made Stamp.



A very good substitute for a rubber stamp can be made in the following manner: First draw the letter or letters desired and paste same on the small end of a common bottle, cork and cut the letters out with a sharp knife as shown in cut.

For Cleansing Various Substances.

Alabaster.—Use strong soap and water.

Black Silk.—Brush and wipe it thoroughly, lay on table with the side intended to show, up; sponge with hot coffee strained through muslin; when partly dry, iron.

To Remove Stains or Grease from Oil Paint.—Use bisulphide of carbon, spirits of turpentine, or if dry and old, use chloroform. These and tar spots can be softened with olive oil and lard.

Stains, Iron Rust, or Ink from Vellum or Parchment.—Moisten the spot with a solution of oxalic acid. Absorb same quickly by blotting paper or cloth.

For Neighbor's Hens.



Take some kernels of corn. With a darning needle bore a hole in each of them, tie a string about 12 inches long to them. On the other end tie a common shipping tag, on which is written: "We are at neighbor Jones'; their chickens are locked up, but we had lots of fun scratching out the sweet corn and other nice seeds in his newly-made garden." Now throw this corn where the chickens will get it; they will swallow the corn, but not the tag. The owner of the poultry will see the tag, and read it. The novelty of the warning will, if anything, cause him to keep his poultry at home, and save you much annoyance.

Linen—Mildew.

May be restored by soaping the spots while wet, covering them with fine chalk scraped to powder, and rubbing it well in.

Aid in Threading Needle.

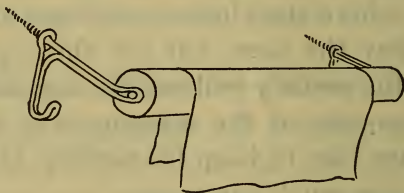
By using a piece of white paper as a background, a sewing machine needle may be sometimes much more easily threaded. Try it.



To Hem New Table Linen.

Stiff new table linen may be easily hemmed by rubbing the upper edge with soap before sewing it on the machine. The soap softens the material, at the same time lubricating the machine needle.

Home-Made Towel Roller.



Take a couple of old clothes hooks as shown in cut and screw them in the wall. Cut an old broom to length desired, and drive six penny nail in the ends and cut the heads off. Easy to make and very durable.

Oiling Clock.

Set a bottle of kerosene oil inside of the clock and leave the bottle open.

Home-Made Shower Bath.



Buy a gasoline oil can from any hardware store and solder sprayer from an old sprinkling can on the faucet. By hanging on a small pulley you can lower and fill can without any trouble. If properly taken care of, will last a lifetime.

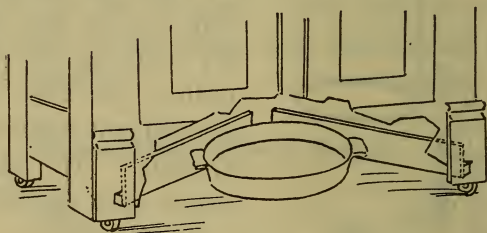
How to Keep Eggs.

Take 2 ounces of lime; 1 quart of salt; 3 ounces of cream of tartar; dissolve in 8 gallons of boiling water. Drop eggs in this pickle, fresh as gathered and keep in dark, cool place.

To Clean a Fountain Pen.

Empty it of all ink and boil in a pint of water into which has been dissolved a table-spoonful of sal soda. The lye made by the sal soda should be weakened with water when the pen has been boiled for several minutes. Pens thus cleaned will work as well as when new.

Easy Way to Place Drip Pan Under Refrigerator.



Nail two small strips under refrigerator in a V shape as shown in cut, and drip pan will always be in the right place.

Removing Grease Spots from the Floor.

Sprinkle unslaked lime on the grease spots, cover with coarse brown paper and iron with a very hot iron. It is well to let the iron stand on the spots a few minutes.

To Cut Warm Bread.

Heat the blade of the knife and it will smoothly and easily pass through the bread.

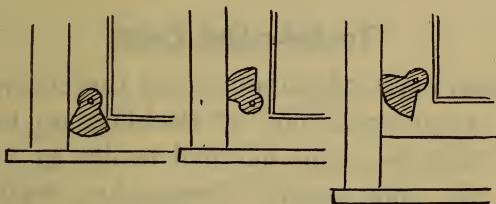
To Prevent Preserves from Molding.

Place a pan full of lime in the cupboard where they are stored away.

To Remove Odors from Ice Boxes.

An easy way to prevent odors in an ice box is to place a can of coke in the box. This will take up all gases and prevent milk from tasting of onions or vegetables which may be kept in the box.

Window Lock.

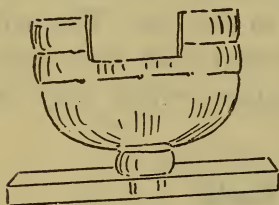


Attached to the window sash by means of a screw and is placed just far enough away from the window casing so that the edges of the outside circle will engage firmly against it, but will not allow the catch to pass the center.

Raising Dents in Wood.

Frequently when hammering on finely finished wood, the hammer may glance and make a bad imprint; such imprint may be moved by pouring enough wood alcohol in the dent to cover it. Then light the alcohol and allow it to burn out. The heat will expand the spot and can be planed and made smooth.

Home-Made Shoe Scrape.



Take an old worn-out broom and cut out the straw as shown in cut. Nail on step and you will have a very practical shoe scrape.

To Take Out Paint.

Equal parts of ammonia and turpentine will take paint spots out of clothing, no matter how long the paint has had to dry in. Saturate the spot several times, then wash out with warm soapsuds. Ten cents' worth of oxalic acid, dissolved in a pint of hot water, will remove paint from wood or glass. Do not let the acid touch the hands, but apply with a mop or brush.

Scorched Food.

Will not be injured if the pan containing the food is set at once in a basin of cold water for a little while.

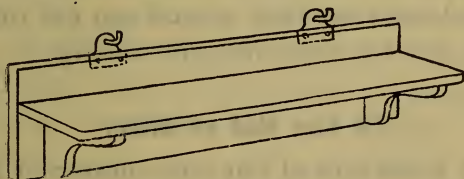
Smell of Paint—To Remove.

To get rid of the smell of oil paint, place a handful of hay in a pailful of water and let it stand in the room newly painted.

To Light Gasoline Stoves.

Fill the drip cups with a cheap grade of wood alcohol. Light and proceed with your stove in the usual way. It will generate the gas just as well and much quicker. This plan is a great help when the stove is clogged.

Home-Made Shelf.



Don't discard the old buckets, as you can use the lugs of same to a good advantage when building your shelves in the kitchen.

To Remove Cake from a Pan.

Set the pan, while very hot, immediately on taking it from the oven, on a damp cloth, and allow it to stand for a few minutes. It will then leave the pan without sticking to its sides.

Keeping Beef Without Ice.

In summer time fresh beef may be kept for several days if placed in a stone jar and covered with good, sour milk. This recipe is given by a lady who has tried it.

Shade for an Electric Light Globe.



Place a piece of tin foil on one-half of the globe as shown in cut. Answers every purpose and costs nothing, as you can get the foil at any grocery store for the asking.

To Get Rid of Mice.

Place a mixture of one part plaster of Paris and one part of flour or meal and a little sugar, in the places where they run. There is no danger in using it.

To Keep a Piano in Tune.

In a furnace heated house, the piano may be kept in tune longer if a vessel containing water is kept in the back of the instrument. The evaporation from the water in the piano keeps the atmosphere from becoming too dry.

Easy Way to Keep Buttons on Overalls.



When the button tears out of the goods, simply bend wire as shown in cut on the back side and you will no longer be worried with the button coming out.

To Restore Colors in Fabrics.

When the color of a fabric has been destroyed by acid, it may be restored by ammonia. Then the application of chloroform will usually restore the original color. Chloroform will also remove paint from a garment, when almost everything else has failed.

Zinc.—Rub with a piece of cotton cloth dipped in kerosene, afterwards with a dry cloth.

Window Glass.—Paint can be removed by a strong solution of soda.

To Insert Rod in Curtains.



Place tip of an old glove on the end of the rod. You will find that this will save you time and worry.

Wood Soles for Damp Floors.

o

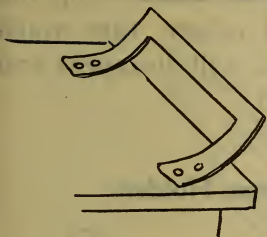
Cut piece of board about the size of the shoes, tack straps on as is shown in cut.



Flies and Roaches.

Flies and roaches may be run off the premises by using a wash for the floors and ceilings of closets, made of a very strong solution of alum. Dissolve the alum in boiling water, using as much alum as the water will dissolve. With this solution wash the floor, ceiling and walls.

Home-Made Shoe Scraper.



Bend an old piece of hoop iron and nail to bottom step. It is easy to make and will help keep the house clean.

Heating Up-stairs Room.

Saw a 10-inch hole through your ceiling and the floor just above the stove; bend a piece of tin to fit hole to make a tight thimble. At the under side, and where you can reach it from below, insert a wooden circle that fits close in the pipe and hinges with two small nails so it will tilt and open damper.

Fountain Pen Made Easily.



Use two pens, place one above the other as shown in cut.

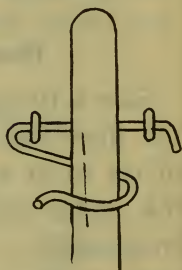
Mold in Safes—To Prevent.

By the placing of a small lump of camphor in the safe, the accumulation of mold upon money, papers, books, etc., will be prevented.

To Take Ink Spots Out of Linen.—Dip the spotted parts into melted tallow, then wash thoroughly. The ink stains will disappear and the linen remain uninjured.

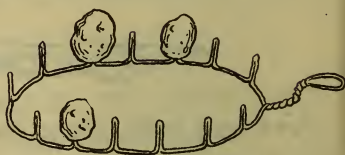
Home-Made Broom Holder.

Made out of number eight wire with a few staples. Easy to make and very durable.



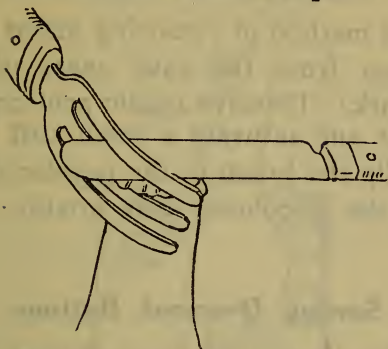
Home-Made Potato Baker.

Use number six galvanized wire and bend same in circular shape as shown, turning points up one and one-half inches.



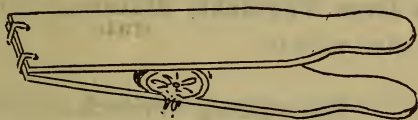
To Clean Tin Ware.—Common soda applied with a moistened newspaper and polished with a dry piece, will make it look like new.

Home-Made Bottle Opener.



Use knife and fork as shown in cut. Easy to handle and does the work.

Home-Made Lemon Squeezer.



Cut two boards into the shape of a paddle; have them 3 inches wide and one-half inch thick and 18 inches long. Bore two holes in one end as shown in cut and run wire through and twist the two ends together. This squeezer can be used for any kind of fruit.

Paint Spots from Clothing.—Saturate with equal parts turpentine and spirits of ammonia.

Cane-Seat Cleaner.

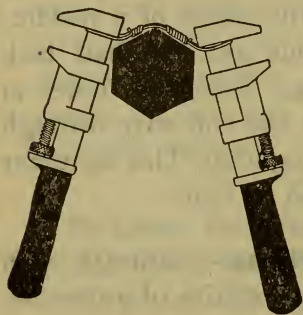
A rapid method of removing stains and discolorations from the cane seats of chairs, wickerwork: Dissolve oxalic acid crystals in hot water and saturate a small stiff brush in it, then dip the brush in the powdered pumice and rub the discolored cane briskly with the brush.

Sewing Overcoat Buttons.

If another button, of somewhat smaller size, is placed on the under side and the button that buttons is sewed to this, it will be found that they will not easily come off.

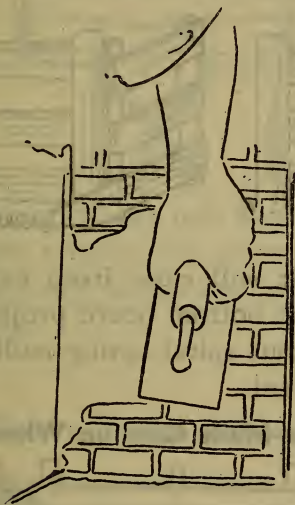
Hands from Vegetable Stains.—Rub with a slice of raw potato.

Emergency Wrench.



When you find that your wrench is too small to use, wire two wrenches together as per cut shown and you will overcome the trouble.

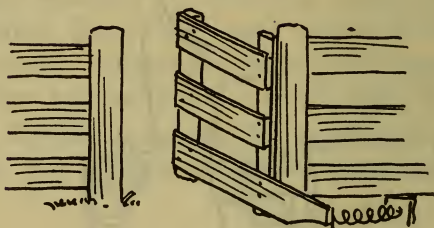
Advantage of Mixing Salt in Mortar When Building a New Chimney.



In building a chimney, put a quantity of salt into the mortar with which the inner courses of brick are laid. The effect will be that there will never be any accumulation of soot in that chimney. The philosophy is thus stated: The salt in the portion of mortar which is exposed absorbs moisture every damp day. The soot, thus becoming damp, falls down into the fireplace.

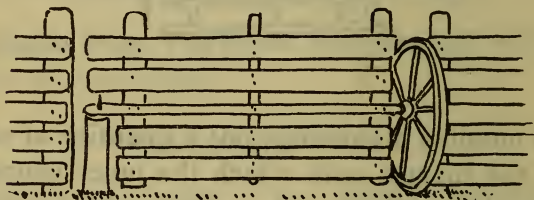
Farm Fixtures and Conveniences

Self-Closing Gate.



A gate that will close itself can be made by making the bottom board project past the post and a stout spiral spring nailed to stake as shown in cut.

Home-Made Gate on Wheels.

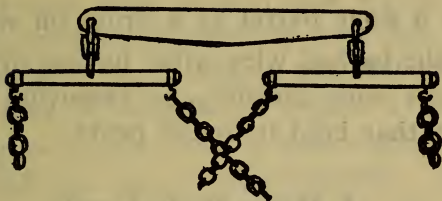


Make like the cut shown and it will last you a lifetime. Easy to make and costs very little.

Cure for Chicken Gapes.

Give four or five drops of turpentine in a pint of cornmeal, twice a day. Feed only a little bit at a time.

Making Them Pull Together.



When a team will not pull together, the following simple remedy will prove successful: Unhitch the inside traces and cross them, as shown in cut.

To Thaw a Frozen Water Pipe.

Unscrew the faucet and insert as much salt as you can get in. Pour hot water on to this and the salt brine will very soon melt the ice in the pipe.

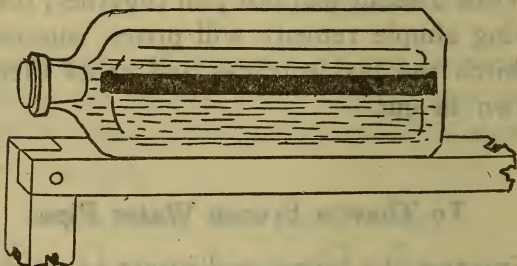
Making the Marks on an Old Square Show Plainly.

Paint the square with red lead and allow it to dry for 5 or 6 hours, then dampen a soft cloth in kerosene and wipe off the surface coat. The paint will adhere in the marks and figures, thus making them plainly visible.

For Taking Up Barbed Wire.

Use a flour barrel as a drum on which to wind the barbed wire, after having first loosened the wire carefully by removing all the staples that hold it to the posts.

A Home-Made Level.



Paste a piece of paper oblong length on the outside of an 8 or 10 oz. bottle. Partly fill bottle and you will have a very good spirit level.

Hinge to Make Door Close Itself.

Bend the lower strap hinge a quarter to a half inch, the amount depending on the size of the hinge.



Mending a Broken Axle.

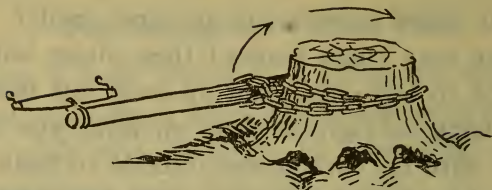
Pass wire over boxing and under clip (where stay chain hooks,) then along bottom of axle to left side, then up over left boxing, then back to right and so on until you have three wire on each lower outside of axle and parallel with each other 2 inches apart. Fasten first and last ends of wire securely. Now insert a strip of iron 1 inch by $\frac{3}{8}$ inch, 1 foot from outside and turn right; another same size on the other side and turn left. This forms a wire cable and by driving the irons through so one end will pass axle every half turn, you can make cable as tight as desired.

Plowshare for Alfalfa.



It is hard to plow alfalfa sod on account of the heavy roots. If you will grind on your emery wheel the edge of the plow-share like in cut, you will have no trouble as the roots slip over the scallops and are cut off easily.

Home-Made Stump Puller.



Take a strong chain (a log chain will do) make a loop at one end, pass the chain around the stump and draw the other end of the chain through the loop, and fasten it near the end of a strong pole 2x4, 13 feet long and hitch the team to the other end and bring them around in a circle. If the stump is very fast, dig the earth away from it.

Nails in Hard Timber.

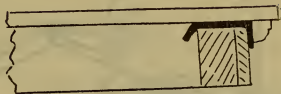
To prevent nails from beading when being driven into hard timber, pour hot tallow over them, and when they cool you can drive them into the hardest of posts.

To Keep Wagon Tires Tight.

Soak the rims in boiling coal tar. Allow them to become thoroughly saturated. After soaking the felloes thus, paint the whole wheel with the hot tar.

Simple Protection for Sills From Rot.

Any sills that are exposed to dampness can be covered with asphalt roofing and same will prevent the sill from decaying.



Leaks Around Chimneys.

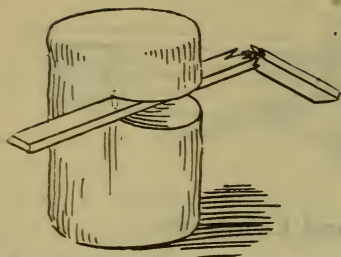
Leaks around chimneys may be stopped with a paste made of tar mixed with road dust. It should be applied to the shingles, where they join the chimney, so as to form a collar, throwing the water well onto the shingles.

An Auger Stop.



Stop is made of a piece of common pipe, that slips over the bit as shown in cut. It is a good idea to have on hand some six or eight different lengths of pipe so as to be able at all times to bore hole any desired depth. You can never bore a hole too deep when using this stop.

Easy Way to Break Kindling.



Make post stationary and saw a notch about 10 inches deep, tapering two and one-half inches on the outside to inch at the bottom as is shown in cut.

Keeping Bolt Tight.

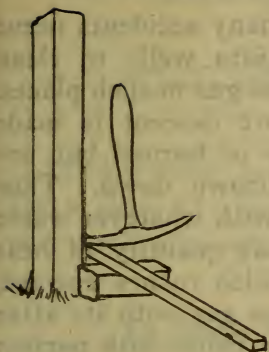
When a bolt becomes loose never tighten it by hammering or riveting. Keep a wide necked bottle of varnish on hand and after screwing the bolt firmly in place, daub the end with varnish.

Preserving a Paint Brush.



Place your brushes in a can that is partly filled with water. Add one inch of kerosene oil to prevent the evaporation of water.

Home-Made Post Puller.



All you need is crow-bar, block of wood and pick and drive pick in post as shown in cut.

Tools Made From Buggy Springs.

In tearing down old buildings a piece of buggy spring makes the best kind of a tool for taking off clapboards and lumber without splitting them. An old spade is the best tool to remove shingles. A piece of buggy spring fitted to a hoe handle like a pick-ax is a good tool to cut weeds from lawns. You can make a good chisel from a piece of a spring.

Screws—In Soft Wood.

Screws, when subject to strain, are apt to work loose in soft wood, and the screw-hole should be first filled with thick glue. If no glue is handy, put powdered rosin around the hole, and heat the screw before driving.

Wells—To Remove Foul Air From.

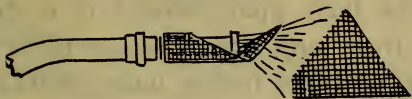
It is well known that many accidents occur to persons going down into wells to clean them, owing to the noxious gas in such places. To remove the gas before descent is made into any well, a quantity of burned but unslaked lime should be thrown down. This, when it comes in contact with whatever water is below, sets free a great quantity of heat in the water and lime, which rushes upward, carrying all the deleterious gas with it; after which the descent may be made with perfect safety. The lime also absorbs carbonic acid in the well. Always lower a light before descending; if it is extinguished, there is still danger of suffocation.

Home-Made Corn Sheller.



Take a piece of hard wood, three by four, two feet long. Saw notches across entire length, making same one and one-half inches deep, all leaning one way, as shown in cut, and you will be surprised to know how quickly you can shell a bushel of corn on this little device.

Home-Made Hose Nozzle.

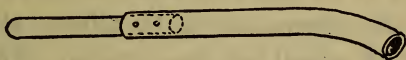


An easy spray can be made by bringing into use a piece of triangular shaped galvanized wire netting as shown in cut.

To Make Whitewash Stick.

And at the same time to prevent it from cracking, add two and one-half ounces pure sodium chloride to every gallon. Be sure and get the pure sodium chloride or else it will not come out a clear white.

Home-Made Carpet Beater.



Here is one of the best carpet beaters one can possibly use; it is easy to make and will last for years. Take an old broom handle about 12 to 14 inches long and trim handle down to fit the hose, and then tack it in place to prevent slipping out. Use any old piece of hose 18 to 20 inches long.

Hose—To Mend Rubber.

Cut the hose apart where it is defective; obtain, from any gas-fitter, a piece of iron pipe two or three inches long; twist the hose over it until the ends meet, wrap with strong twine, well waxed, and it will last a long time.

Home Made Cotton Chopper.

Make a wooden wheel 25 inches in diameter of three thicknesses of inch lumber. Mark off on the circumference eight equal spaces ($9\frac{3}{4}$ inches each) and saw out V-shaped notches $2\frac{1}{2}$ inches wide and 3 inches deep. Fasten wheel of axle through center, the axle being long enough to reach the plow beams of two-horse cultivator, on which it is to work in slots 12 to 15 inches in front of plows, so as to allow beams of two-horse cultivator, on which it is to work in slots 12 to 15 inches in front of plows, so as to allow the entire weight of wheel on the ground. The weight of wheel revolving on the row will press young cotton to the ground; the notches will leave bunches standing at the regular distance. Cultivator plows will cover the plants while pressed down and leave the cotton as is usual after first chopping with hoe and does not interfere with the plowing.

Home-Made Truck for Swill Barrel.



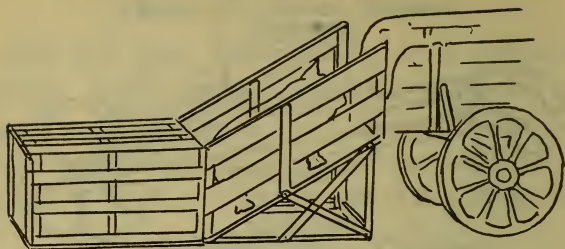
Use plow handles attached to any old discarded wheel, placing barrel between the handles as shown in cut.

Home-Made Stump Puller.



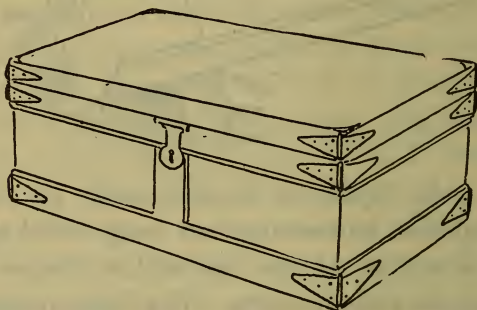
Get a hard piece of timber, six by six inches and eighteen to twenty feet long, bevel down to three inches at one end and screw an iron plate on as shown in cut. Dig hole under the root of the stump and pry out. If your stumps are small, two men can do more in a day than three can with a machine. Try it and be convinced.

Easy Way to Load Hogs.



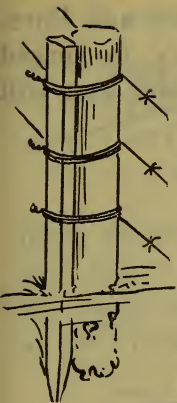
Make a chute ten feet long out of heavy timber, and the width of your wagon and drive your hogs in. It will save you time and money.

Corners for Chests.



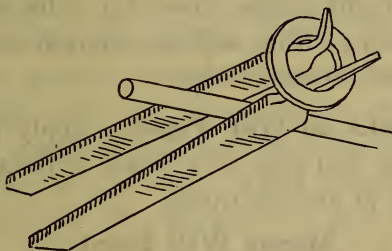
Any chest that is heavy and much handled can be strengthened by reinforcing the corners with common strap hinges as shown in cut.

Repairing Fence Post.



When fence post has rotted off at the ground, take two pieces one by three and drive into ground and nail on opposite sides, as shown in cut.

Home-Made Wrench for Turning a Pipe.

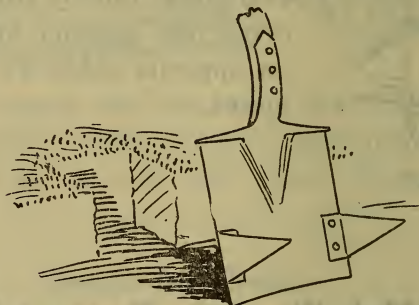


If you haven't a pipe wrench handy, take two old files and an ordinary washer, as per cut shown.

A Cheap Paint

Take a gallon of skim milk and add Portland cement in right consistency to spread well; same will make a drab color and will last for many years.

An Improved Spade.



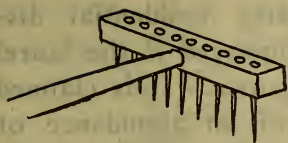
Take a couple of old mower blades, heat and bend at right angle, rivet on the spade as shown in cut. You will find that it will make a clean cut on both sides.

Oil Marks on Wall Paper.—Apply paste of cold water and pipe clay, leave it on all night, brush off in the morning.

Money Well Spent.

By buying a pair of four-inch pulley blocks and use them for stretching barb wire fences, raising hogs during killing time, or your hay and any other heavy artic.el

Home-Made Rake.



Take a piece of two by three, 15 inches long and bore holes with brace and small bit every two inches apart. using twenty penny nails. Nail small strip over top of rake to keep the nails from working loose and coming out. For handle, use an old broom handle.

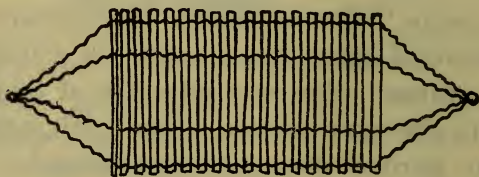
Toads.

The common toad, ugly enough, but not "venomous," as that which Shakespeare says "hath yet a jewel in its head," is a friend of the gardener. He eats all sorts of bugs and insects that are garden pests. His presence in the garden should be encouraged. Their presence may be encouraged by providing damp, shady spots for them to retire to in the heat of the day. They may be handled without fear of contagion, as they are not the source of warts on the hands of little children, as has been sometimes claimed. If your garden has none, by all means catch some in the street about dusk in the evenings, in the early summer, and put them in the garden. It will pay.

Plants that Prevent Malaria.

The atmosphere in damp residential districts may be greatly improved if the laurel and the sunflower are grown. It is claimed that the laurel gives off an abundance of ozone, and the sunflower destroys the malarial condition of the atmosphere. It is not necessary to grow many of these plants in order to greatly increase the dryness and salubrity of damp places.

Home-Made Hammock.

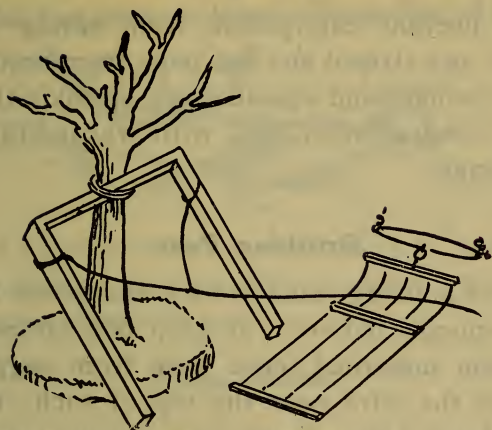


Take twenty-five or thirty old barrel staves and bore two half-inch holes in each end of the staves, running wire through as shown in cut.

Fresh Tomatoes the Year 'Round.

Freshly gathered tomatoes, packed in dry salt, in an earthen jar, it is said, will keep almost indefinitely.

Transplanting Large Trees.



Make frame of four by fours and braced as shown in cut. Dig a small ditch around the tree, hitch horse to the rope and see how easily it comes up.

To Protect Trees from Rabbits and Borers.

Make whitewash of unslacked lime and powdered sulphur, one peck of lime and one pound of sulphur, putting sufficient water to make it easy to apply with a brush. To keep the rabbits away, whitewash the body of the tree three feet high. Take the dirt away from the first set of roots and apply the whitewash and it will keep away the borers.

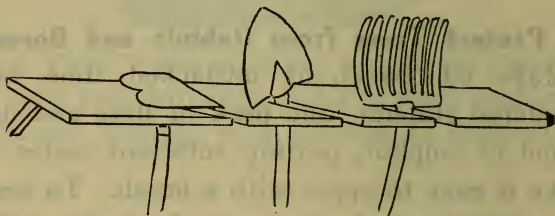
Remedy for Bugs.

To prevent caterpillars from eating cabbages, and striped and flat bugs from destroying cucumber and squash vines, sprinkle them, when covered with dew, with wheat bran or middlings.

Brushing Peas.

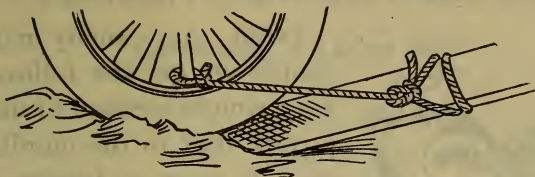
Drive a string stake at each end of the row, also enough between to keep one strand of common unbarbed fence wire from sagging. Fasten the wire near the top of each stake, then hang heavy brush tops down over the wire. The vines will cling to the fine brush first and as they grow tall.

Home-Made Rack for Tools.



Saw six inches into a 1 by 12 board, making a slot as shown in cut; slots to be every six to eight inches apart.

To Move an Auto or Heavy Truck Out of Mud



Cut notches in one end of plank to prevent rope slipping and tie rope to spoke, placing board as shown in cut.

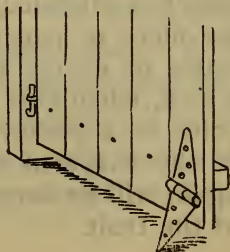
Trace Holder.



Tack leather strap on tree as shown in cut.

Home-Made Stop for Gate or Barn Door.

Fasten any old hinge to lower part of the door or gate, and when not in use turn back against the door or gate. You will find that it will hold it partly open and secure.



Printing Monograms on Fruit.



From an anonymous source we get the following very simple method of doing a trick that to the uninitiated will seem to border on the marvelous:

Monograms, initial letters, or other designs, can be printed on such fruit as apples, pears or peaches by the action of the sun, with very pretty effect of either a light or dark color. To do this, draw the monogram, letter or design on a piece of writing paper, and paste it with mucilage or glue upon the side of the fruit exposed to the sun just before the fruit begins to color. When the fruit is ripe, and the paper is removed, the design will appear in a lighter or different color to the rest of the fruit; as, for instance, if the experiment is tried on a yellow-fleshed peach with a red cheek, the design will appear in gold, surrounded with red. If the opposite effect is intended, take a small oval or circular piece of paper, and cut out or pierce the letter or design in it, and paste on the fruit, which, when ripe, will have the design in high color on a yellow or on a light green ground of the shape of the piece of paper, and this again will be surrounded by the brighter color of the fruit.

Veterinary and Stock Department

Castrating a Large Boar.

Use a large barrel, about the size of the hog. Put corn in and induce the hog to go in after the feed. When he is in let two stout men lift the barrel on end. The hog may then be handled with perfect safety and with less worry to man and beast. This plan has been tried and is recommended.



Hog Cholera Remedy.

Take one pound wood charcoal; 1 pound sulphur; 2 pounds sodium chloide; 2 pounds sodium bicarbonate; 2 pounds sodium hypophosphite; 1 pound sodium sulphate; and 1 pound antimony sulphate. All these should be pulverized and thoroughly mixed. A dose is a tablespoonful for a 200-pound hog, and in the same proportion for the pigs. It may be used as a preventive. Give only once a day. Keep the hogs while being treated in a clean, dry place.

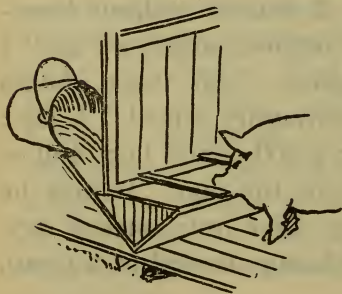
A New Remedy for a Balky Horse.

A new remedy for a balky horse is to remove him from the vehicle, take all the harness off, attach his head to his tail and make him turn around in a circle until he is perfectly dizzy. Then hitch him up and he will move off as if nothing had happened.

Remedy for Hog Cholera.

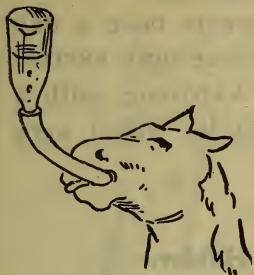
Mix a half teacupful of gunpowder with as much sweet milk. This is a dose for a full grown pig. Gunpowder is said to be an excellent preventive, if used in the feed. It is said to be good for chicken cholera. Make the dose much smaller.

Home-Made Hog Trough.



Cut shows how simple a sensible hog trough can be made. Any child eight or nine years old can slop or water the hogs as easily as any grown person.

Easy Way to Drench Stock.



Take a piece of rubber hose 12 inches long and stretch over neck of bottle as shown in cut. You will find it to be an easy as well as safe way to drench stock.

To Expel Worms from Hogs.

Take one-fourth to one-half can of concentrated lye to a barrel of soaked corn, shorts or slop. Your wormy, coughing, stunted animals will soon make a wonderful change for the better.

For a Choking Cow.

A cow that is choked with an apple or potato may sometimes be relieved by breaking a raw egg in her mouth, her head being elevated at the time.

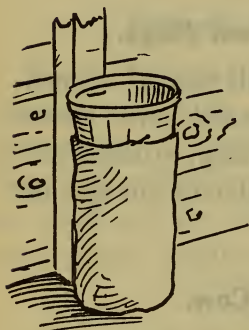
Sure Cure for Worms in Horses.

Put one tablespoonful of linseed oil in a feed of meal every day for 5 days; will expel all worms.

Ridding Stock of Warts.

Kerosene poured on the warts once a day will soon rid the animal of these ugly excrescences. A bottle filled with kerosene, with a quill through the neck, will be found very handy for this purpose.

Home-Made Bag Holder.

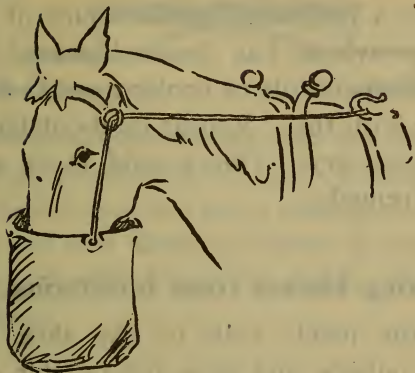


Take a nail keg and knock the bottom out; drive eight penny nails slanting upward from the inside and three inches from the bottom. Nail keg to a post or side of the barn like cut shown.

Dehorning Young Calves.

When the calf is two or three weeks old, or as soon as the horns appear, dampen them and sprinkle with pulverized lye. The horns must be moist so that the lye will adhere. This is a very simple method and does not hurt the calves.

Home-Made Feed Bag.



Use an old grain sack, with small piece of rope running through the halter or bridle and back to check rein hook like cut shown.

To Cure Hoof Rot in Cattle.

Dissolve one and a half teaspoons each of common salt and copperas in a teacupful of strong cider vinegar that has been brought almost to the boiling point on a hot stove. Do not let it boil. Apply when cool to the affected part after thoroughly cleaning it. Also rinse the mouth of the animal with the mixture. Two or three applications generally effect a cure. The preparation may be used to cure other foot or mouth diseases.

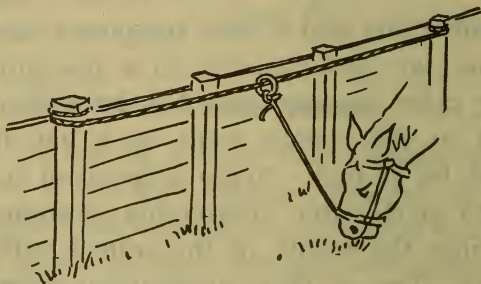
Cure for Colic in Horses.

Put into a long neck bottle a pint of warm milk, into which has been dissolved three heaping teaspoonfuls of cooking soda. Drench the horse with this. Repeat in about ten minutes if necessary. This is said to be a very effective remedy.

Curing Horses from Interfering.

Have the inside calk of the shoe larger than the outside and pare the outside of the foot lower. This will cause the pastern joint to be thrown out and prevent the other foot from striking.

Grazing.



Place ring on rope and tie to halter as shown in cut.

Improvement on Doubletrees.



To avoid sudden shocks that will come when wagon is heavily loaded and on rough roads, if you will bring into use a common old buggy spring and bolt same as shown in cut to doubletree, it will save your team from sore shoulders.

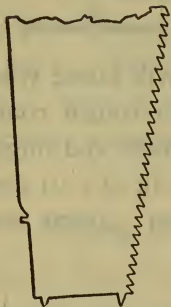
A Handy Calf Feeder.

To keep calves from turning over the bucket in which they are fed, make a round hole in a plank, large enough to allow the bucket to go half-way down and fasten this plank securely to the side of the pen, fourteen or eighteen inches high. This will be found better every way and more sanitary than the usual feed trough.

Cure for Kicking Cow.

Any kicking cow may be easily milked, if her hind legs, about the hocks, are fastened together with a leather strap. The britchen strap belonging to the wagon harness may be used for this purpose.

Easy Way to Keep Saw From Falling When Standing on End.



File two small teeth like shown in cut, the blade should be filed off square at the end and at right angles to a line on the center of gravity. The teeth are then formed by filing away sufficient metal on the blade. Saw fixed in this way will stand in almost any place or position.

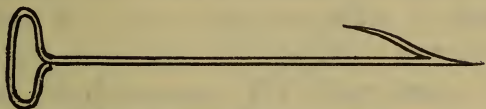
Killing Lice on Animals.

Take equal parts of coal oil and lard. Mix and add a very small quantity of carbolic acid. Rub on the animal, not all over, but in spots. The vermin will leave.

To Prevent Crows Eating Corn.

Corn to be used for seed, if mixed in the proportion of four quarts of corn to one tablespoonful of coal tar, and then dried in ashes to prevent sticking to the hands when being planted, will not be troubled by birds or worms.

Home-Made Hook for Pulling Straw Out of Hay Stack.



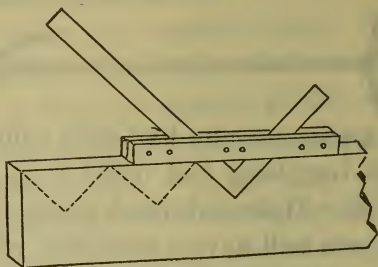
Take a piece of one-half inch round iron, six or seven feet long and make loop for handle at one end. Make fish hook point at the other end and you will have a tool that will not only last you a life time, but one that will pay for itself many times.

Some Points About Horses.

Light sorrel or chestnut with feet, legs and face white; is a mark of kindness. A deep bay, with no white hair, will be a horse of great bottom, but a fool, especially if his face is a little dished. They are always tricky and unsafe. A black horse cannot stand the heat, nor a white one the cold. The more white about the head the greater his docility and gentleness.

Face and Neck.—Dish-faced horses must always be avoided, and a broad forehead, high between the ears, indicates a very vicious disposition; while a long, thin neck indicates a good disposition.

Easy Way to Lay Off Stringers for Building Steps.



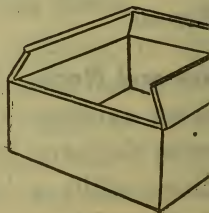
Place clamp on square, making width depth desired as shown in cut.

To Keep Sow from Eating Pigs.

Take a rag and saturate it with kerosene. Rub the little pigs with this. The smell of the kerosene keeps the sow from eating the pigs.

Home-Made Feed Box for Stock.

To prevent stock throwing feed out of box, nail strip around edge of box and allow it to project over the inside two and one-half inches.



To Drive a Cow.

An unruly cow may sometimes be more easily driven if a short piece of chain is tied to one of her front legs. When she attempts to move the chain thrashes the other legs. She soon discovers the reason and walks.

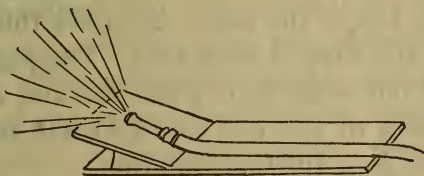
For Colic in Horses.

Give one tablespoonful of turpentine in a pint of water. If not relieved soon repeat the dose.

To Cure Founder.

One tablespoonful of alum, given in the feed with water, will in three days cure a foundered horse.

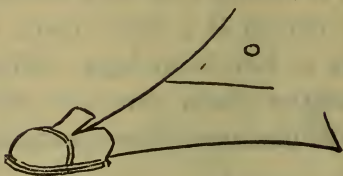
Home-Made Hose Holder.



Use a piece of one by six, two feet long; attach another piece six or seven inches long to the end of the board at an angle of 45 degrees as shown in cut. You will find that it will make a very wide spray.

To Keep Plow Point Out of Ground.

When going from one field to another, if you will take the toe of an old shoe and place same over



the plowpoint as shown in cut, it will eliminate a great deal of worry.

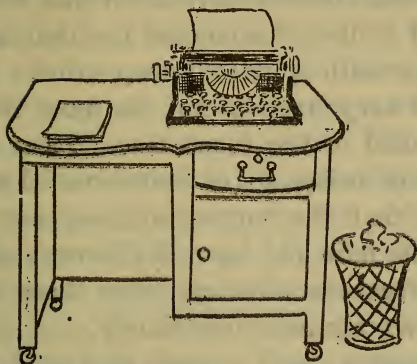
A Rubbing Post.

Take a stout piece of timber, about three inches in diameter, and drive into the ground, allowing it to extend above ground about two feet. Staple the end of a stout cotton rope to the post, three inches above ground and coil it tightly around the post, stapling the end at the top of the post. Saturate this with kerosene and keep it saturated. The pigs will soon find out what it is good for and it will relieve them of lice and nits and will help to keep them in a thrifty condition.

To Prevent Cows Jumping Fences.

If a chain, weighing about one pound, is strapped to one of the front feet of a cow, it will prevent her from jumping. Try it.

Good Typewriter Desk.



Use an old discarded washstand, sawing out the drawers as shown in cut. Easy to make and saves the cost of buying a new one.

How to Fit a Horse Collar.

A new horse collar may be fitted to the neck of the animal that is to wear it, by soaking it for a few minutes in a tub of water before using. This softens the leather and allows the neck of the animal to adjust its inequalities to the collar. The collar when thus treated should be kept on the animal four or five hours, thus giving it plenty of time to dry thoroughly. It will then retain the same shape ever afterwards and so fit the horse's neck and prevent chafes and sores.

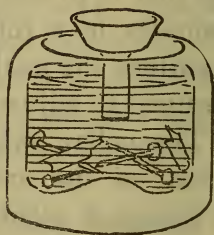
To Cure a Foundered Horse.

Clean out the bottom of the horse's hoof. Hold it in a horizontal position and fill the cavity with spirits of turpentine. If the cavity is very large do not use more than a table-spoonful of the turpentine. Then set this on fire by using a red hot iron. Use extreme care that the turpentine may not run down on the hair and burn the horse's skin. If all the feet are affected, burn them all. Relief follows almost immediately.

Another good remedy is said to be a pint of sunflower seeds, given in his feed immediately the founder is discovered.

Still another is to stand the horse in water, that reaches half way up his sides.

To Prevent Ink From Corroding Pen Points.



Place broken pen points in the well. Same will destroy all acids and overcome the trouble.

Common Veterinary Medicines.

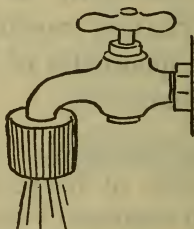
Herewith is given a list of medicines commonly used by veterinarians, together with a definition of the terms used by them. The commonest way of administering medicines to horses and cows is the drench. The medicine to be administered is diluted with a pint of water or more in a strong bottle, and poured into the animal's throat. Powdered medicine and some solutions in small quantities, where the taste is not too disagreeable, may be given in wheat bran. The trouble with this plan is in regulating the quantity given, as there is always more or less wasted. Veterinarians use capsules. Some medicines may be administered in enemas in the rectum, or inhaled in hot water. Hypodermic syringes, where the operator has had some experience, may be used successfully in administering some drugs. Irritating medicines should be mixed with large quantities of bran and water to render them harmless.

Antiseptics are substances which check or prevent the growth of bacteria and parasitic fungi. The most common ones are table salt, corrosive sublimate, carbolic acid, idioform, zinc chloride, iodine, iron chloride, formalin, blue vitriol and lunar caustic.

Disinfectants and deodorizers are used for similar purposes and also to absorb moisture and disagreeable odors. The most important disinfectants for veterinary use are chloride of lime, common lime, sulphurous acid, formalin and permanganate of potash.

Anesthetics are chemicals which produce insensibility or loss of consciousness. General anesthetics are given by inhalation, and the most common ones are chloroform, ether, a mixture of these drugs and nitrous oxide. Local anesthetics produce insensibility in the part to which they are applied. Good examples of this group of drugs are cocaine, carbolic acid, extreme cold, as, for example, from the evaporation of ether and aconite.

To Prevent Breaking of Dishes When Washing.



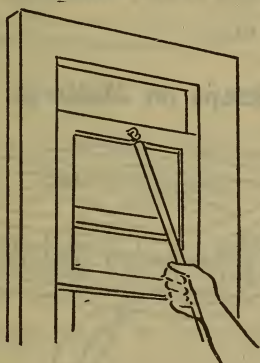
Cut a small piece of rubber hose and slip over the faucet.

Anodynes are substances which relieve pain and include hot or cold water, belladonna, cocaine, chloral hydrate, opium, morphine, etc.

Anthelmintics, vermicides or vermifuges are substances used to expel or destroy worms. A number of these are used, including various purgatives, gasoline, turpentine, carbon bisulphide, etc.

Alteratives are substances which neutralize or counteract the formation of disease products in the blood. The ones most frequently used include mercury, iodine, arsenic, etc.

Easy Way to Lower Window.



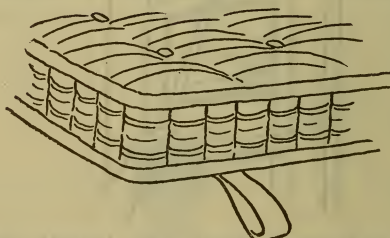
Cut an old mop stick the length of sash; fasten stick to top sash with a small staple, using small screw eye in end of stick.

Narcotics are drugs to which the effects are too well known to require description. In treating domestic animals, opium, Indian hemp, chloral hydrate and belladonna are most frequently used.

Purgatives, laxative or cathartics are substances used for the purpose of loosening the bowels. In veterinary medicines, the most important purgatives are Glauber salts, Epsom salts, aloes, castor oil, Croton oil and jalap.

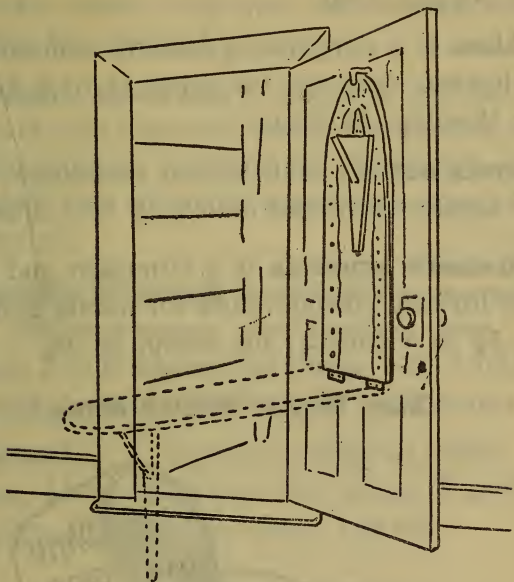
Vesicants are blistering reagents, the commonest ones being cantharides or Spanish fly, Croton oil, strong acids, biniodide of mercury, silver nitrate, etc.

Straps on Mattress.



Makes it much easier to handle. Sew one on each of the four corners. Make straps of heavy ducking.

Ever-Ready Ironing Board.



Hinge board to the inside of a closet or pantry door. Out of the way and in place.

In the following paragraphs brief notes are given on the action and doses of some of the common drugs used in veterinary practice.

Aconite lowers the temperature by weakening the pulse and causing an increased perspiration. Doses for horses, 20 to 30 drops;

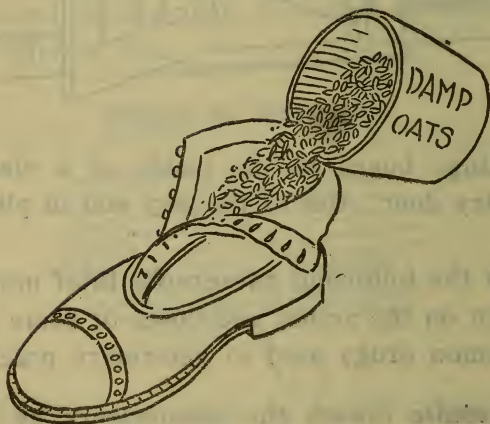
for cattle, 40 drops; for sheep, 3 to 5 drops; for dogs, 1 drop.

Aloes is a purgative generally administered to horses; dose for the horse, 4 to 6 drams; for the dog, $\frac{1}{2}$ dram.

Areca nut is a well known vermifuge; dose for horses, catle and mules, $\frac{1}{2}$ to 1 dram.

Aromatic ammonia is a stimulant and antidote for acid poisons; dose for horses and cattle, $\frac{1}{2}$ to 4 ounces; for sheep, $\frac{1}{2}$ oz.

Easy Way to Stretch Shoes.



Pack damped oats in the shoes. Leave oats dry out before removing.

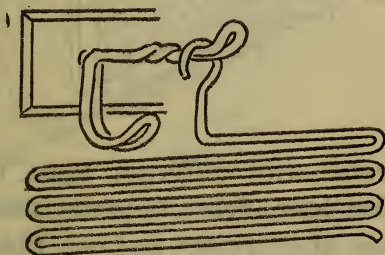
Arsenic is an alterative and nerve tonic; dose for horses, 5 grains; for cattle, 5 to 8 grains; for sheep, 1 grain.

Bismuth subnitrate produces a coat on the stomach and intestinal walls and soothes irritation in cases of diarrhea; dose for horses, 2 drams; for sheep, 20 grains; for dogs, 5 to 10 grains.

Bromide of potash lowers the temperature and checks nervous excitement; dose for horses, 2 to 6 drams; for sheep, 1 to 2 drams; for pigs, 1 dram; for dogs, 10 to 20 drams.

Calomel is a vigorous cathartic; dose for horses, 15 to 60 grains; for sheep, 8 grains; for pigs, 5 grains; for dogs, 1 grain.

Trouser and Skirt Hanger.

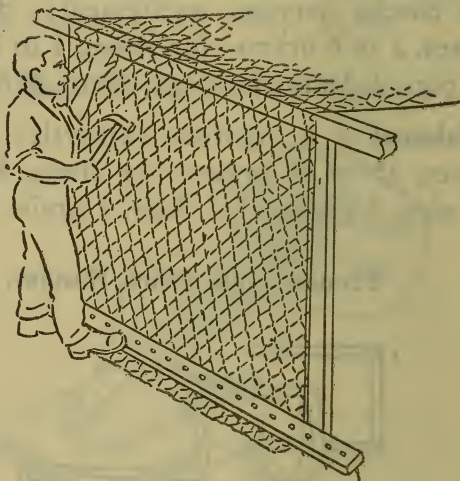


Bend heavy wire as shown in cut.

Cantharides when used locally is a blistering agent and given internally it is a stimulant; dose for horses, 6 grains; for sheep, 4 grains; for pigs, 3 grains.

Carbolic acid is mostly used as an antiseptic and disinfectant and should be used in a solution in water at the rate of 1 part to 100 parts.

Stretching Wire Netting.

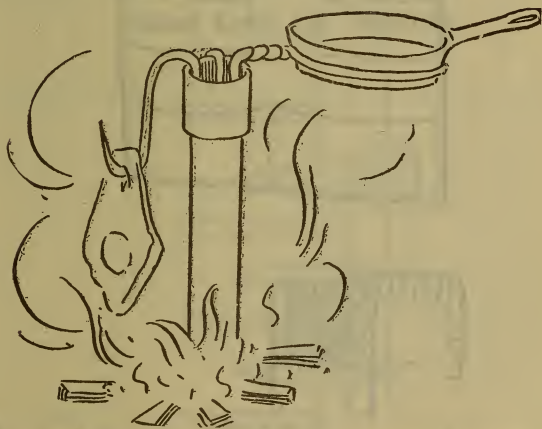


To stretch wire uniformly tight, take a 2x4 4 to 6 feet long, drive 16-penny nails through at a space of every six inches. Place the 2x4 on the wire and stand on same as shown in cut.

Castor oil is a mild purgative of great value. Dose for horses, 1 pint; for cattle, 1½ pints; sheep, ¾ of an ounce; dogs, ½ an ounce.

Catechu is an astringent and useful in checking diarrhea. Dose for horses, 2 to 5 drams; for sheep, 1 to 2 drams; for dogs, 20 grains. Chalk may also be used for the same purpose in doses of 1 ounce for the horse and 1 dram for sheep, pigs or dogs.

Camp Fire Cooking.

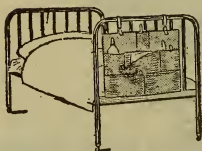
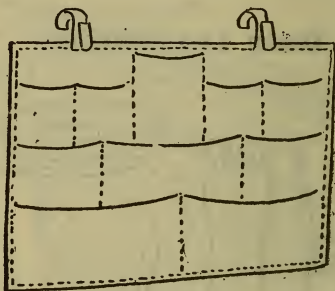


Use an old piece of gas pipe about 36 inches long, and drive into the ground to support wire holders. Use No. 6 wire.

Charcoal is very useful in checking digestive disturbances and as an absorbent for various kinds of material or acid poisons. It may be given in as large doses as will be taken.

Chloral hydrate is a powerful narcotic, valuable in the treatment of spasmodic colic. Dose for horses, 1 ounce; for sheep, 1 dram; for pigs, 50 grains; for dogs, 25 grains.

A Handy Pocket to Hang on Foot of Bed.



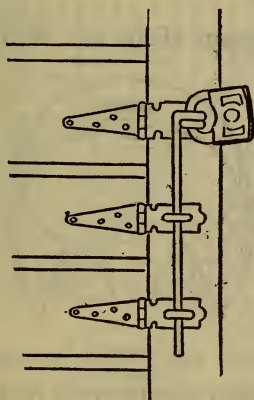
A useful receptacle for an invalid, to be made of demin, linen or any heavy material as shown in cut.

Corrosive sublimate is an active poison much used as an antiseptic and for ordinary purposes should be used at the rate of 1 or 2 parts to each 1,000 parts of water.

Croton oil, commonly used as a blistering agent, may also be administered as a vermifuge. Dose for horses and pigs, 1 to 10 drops; for dogs, 1 drop.

Epsom salts is one of the most frequently used purgatives. Dose for the horse, 1 pound; for cattle, 1 to 2 pounds; for sheep, 1 to 4 ounces; for the dog, 1 to 4 drams.

Good Lock for Drawers.



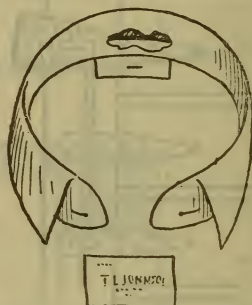
Use strap hinges. Bend pieces of iron as shown in cut.

Gentian is a bitter tonic. Dose for the horse, 4 to 8 drams; for sheep, 1 to 2 drams; for pigs, 50 grains; for dogs, 15 grains.

Formalin is a non-corrosive and non-poisonous antiseptic of great value, its chief disadvantage being an irritating effect on the eyes and nose. For ordinary purposes, such as treatment of wounds and disinfecting, it may be used in a 2 to 4 per cent solution of water.

Ginger is used as a stomachic and stimulant. Dose for horses, 1 ounce; for sheep, 1 dram; for dogs, 15 grains.

Emergency Button Hole for Worn-Out Collar.



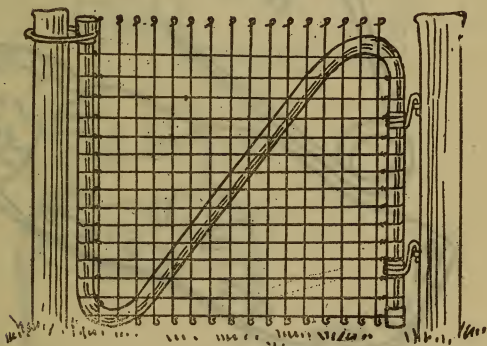
Punch hole in a small piece of cardboard and slip under band of collar, and use as shown in cut.

Glauber salts is a valuable and much used purgative. Dose for the horse, 1 pound; for cattle, 1½ pounds; for dogs, 1 dram.

Hydrochloric acid is used as a corrective for faulty digestion. Dose for horses and cattle, 1 to 3 drams; for sheep, 25 drops; for pigs, 20 drops.

Indian hemp is a narcotic much used in cramp colic. Dose for horses, ½ to 1 dram; for sheep, 10 to 16 grains; for dogs, 1 to 2 grains.

Substantial Gate.

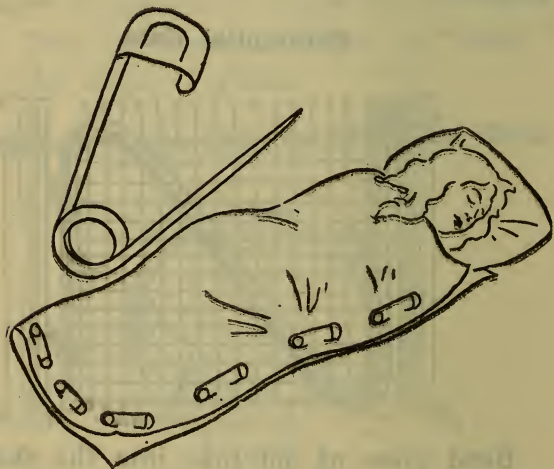


Bend piece of old pipe into the shape of the letter N. Cover gate with wire netting and hang with wire hooks with staples fitted into the post.

Iodide of potash is an alterative extensively used for the internal treatment of various infectious diseases. It is a specific for lumpy jaw. Dose for horses, $\frac{1}{2}$ dram; for cattle, 1 to 2 drams.

Iron peroxide, sulphate and carbonate are used as general tonics. Dose for horses, 2 to 4 drams; for sheep, $\frac{1}{2}$ dram; for dogs, 2 to 5 grains.

A Sleeping Bag.

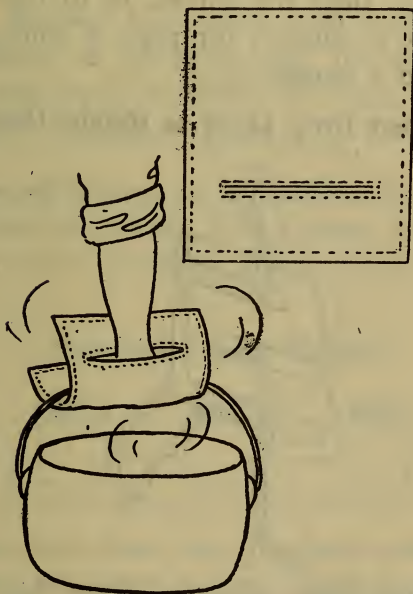


Double an ordinary blanket and pin up one side and the bottom with large horse blanket pins.

Jalap is a purgative chiefly used for the smaller animals. Dose for hogs, 1 to 2 drams; for dogs, 1 dram.

Laudanum is much used as an anodyne and in treatment of colic. Dose for horses, 2 to 4

Kitchen Convenience.



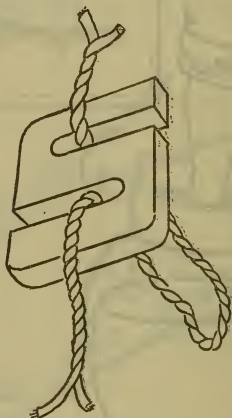
Make a four-ply pad of white canton flannel, and cut a slit to accommodate the hand as shown in cut.

ounces; for sheep and pigs, 2 drams; for dogs, 20 drops.

Lime water is an astringent and antidote for acid poison. Dose for horses, 4 to 5 ounces; for cattle, 5 to 8 ounces; for sheep, 1 ounce; for dogs, 1 dram.

Linseed oil is a well known and valuable purgative. Dose for horses, $\frac{1}{2}$ to $1\frac{1}{2}$ pints; for sheep, 6 ounces; for pigs, 5 ounces; for dogs, 1 to 2 ounces.

To Adjust Drop Light to Height Desired.



Saw slits from opposite sides just large enough to admit wire. This will enable you to raise or lower the light to any length desired.

Male fern is chiefly used as a vermifuge. Dose for horses, 1 ounce; for sheep, 2 drams; for hogs, 1 dram; for dogs, 30 drops.

Morphine is used like laudanum in relieving pain and quieting the action of the intestines. Dose for horses, 5 to 10 grains; for dogs, $\frac{1}{8}$ to $\frac{1}{4}$ grain.

Nux Vomica is a much used tonic. Dose for horses, 20 to 60 grains; for cattle, the same; for sheep, 10 grains; for hogs, 8 grains; for dogs, 2 grains.

Olive oil is used as a laxative, like linseed oil. Dose for horses, 1 to 2 pints; for sheep; 3 to 6 ounces; for dogs, 1 to 3 ounces.

Practical Pigeon Hopper.

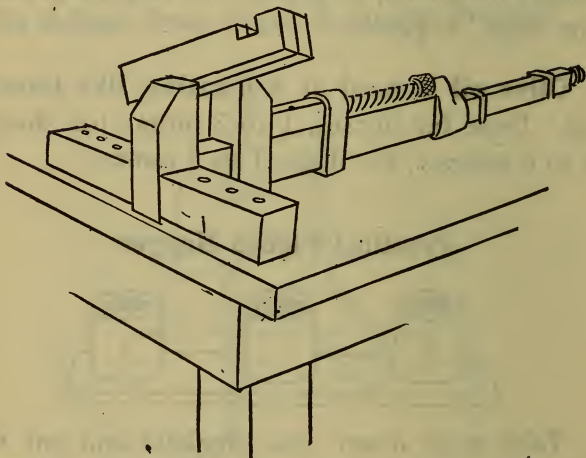


Take some quart size buckets and cut the tops out as shown in cut. Tack the buckets on a 1x6 plank, having buckets 10 inches apart. It will cut your feed bill, as they are unable to throw the feed out.

Opium is a narcotic used for the prevention of spasms. Dose for horses, 1 to 2 drams; for cattle, 2 to 4 drams; for dogs, 1 to 5 grains.

Sulphur is used internally as an alterative. Dose for horses, 1 ounce; for sheep, 1 to 2 drams; for pigs, 1 to 4 drams; for dogs, 50 grains.

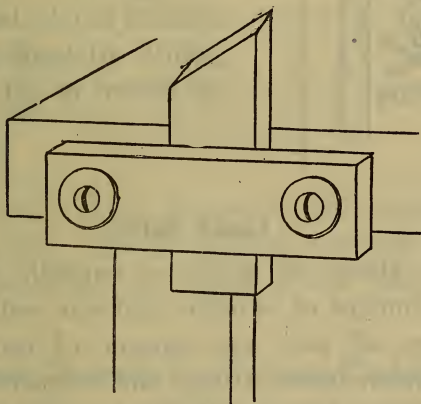
Homemade Vise.



Use an old monkey wrench from which the handle has been broken. Staple handle of wrench to the bench and nail small pieces at either side of the jaw as shown in cut.

Sweet spirits of niter acts as a slight stimulant, lowers the temperature and causes sweating. Dose for horses, 1 to 3 ounces; for cattle, 3 to 4 ounces; for sheep, 3 to 6 drams; for pigs, 2 drams; for dogs, 50 drops.

Homemade Vise.

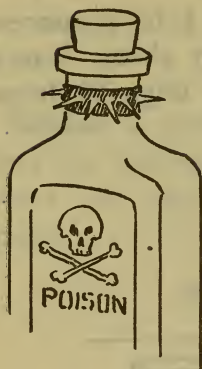


Screw piece of wood to bench, placing washers under the screws as shown in cut.

Sheep—To Prevent Jumping Fences.

Clip off the eyelashes of the under lids with a pair of scissors. The animal will not attempt a fence again until the eye-lashes are grown.

To Prevent Taking of Poison Out of an Un-labeled Bottle.



Take a piece of ribbon or cloth and stick five or six eight-ounce tacks through same; then tie on neck of bottle, leaving the points sticking outwards as shown in cut.

Good Salve.

Put about 25 drops of carbolic acid into three ounces of vaseline and stir well. It will remove all pain and danger of infection at once from insect stings and animal bites and scratches. Also for obstinate sores and ulcerations.

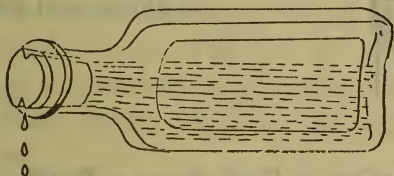
For Barbed Wire Cuts.

Bathe with a solution of carbolic acid and water several times daily and apply mutton tallow. The smoke of burning wool is the best remedy possible for a wound made by a rusty nail or a piece of glass.

Taking Capsules.

Take a spoonful of thick milk or cream, put the capsule in center of it and cover with milk or cream. Then swallow it as though it were only milk.

Home-Made Medicine Dropper.



Make two V shape grooves in the stopper as shown in cut. Size of grooves will depend on the character of the liquid in the bottle.

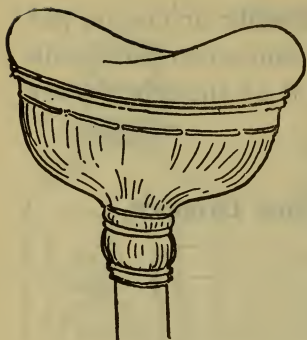
A Simple Remedy for Persons Choking.

Persons who are choking from having swallowed large substances like peach stones, have been relieved by breaking into the upturned mouth a fresh egg.

For Slight Constipation in the Baby.

Do not dose, but knead the bowels very gently, using castor oil warmed just a little bit.

Home-Made Crutches.



Use an old worn out broom as shown in cut, pad and cover same. Easy to make, is cheap and durable.

Removing a Cork from a Bottle.

A cork that has been pushed into a bottle accidentally can be easily removed in the following manner: Tie several knots in one end of a string to form a large cluster and drop it into the bottle, holding on to the other end of the string. The cluster formed by the knots at the end of the string will easily draw out the cork.

A Household Salve.

A good salve for family use is made by melting together equal parts of beeswax, tallow, rosin and camphor gum.

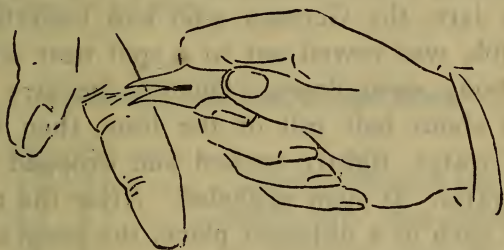
An Easy Way to Take Dry Medicine.

Wrap the dose to be taken tightly in a bit of tissue paper. The wrapper keeps the medicine from the palate and acts as a capsule.

Cure for Rattlesnake Bites.

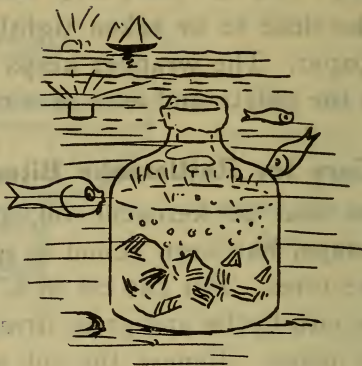
Common coal or kerosene oil, such as is used in lamps, has been found a specific for rattlesnake bites. Put the oil in a small cup or large mouth bottle and press firmly against the bitten place. Renew the oil every few minutes.

Easy Way to Remove Splinters.



Take a common steel pen point and press it down on the flesh about one-third of an inch away from the splinter, then push it on over and catch the splinter between the points as shown in cut.

To Raise the Body of a Drowned Person.



The following scientific method was recently used successfully in Oklahoma. Procuring a quantity of unslacked lime and some gallon glass jars, the German who had undertaken the job, was rowed out to a spot near where the body went down. One of the jars was filled about half full of the lime, then filled with water, tightly corked and dropped into the water. It soon exploded. After the third trial, each in a different place, the body came to the surface.

Rust from Steel.—Take half ounce of emery powder mixed with one ounce of soap and rub well.

A Sure Cure for Neuralgia.

Take the white of an egg and spread it on a piece of soft cotton cloth, sprinkle pure ground black pepper over it until it is almost black, then bind it to the affected parts.

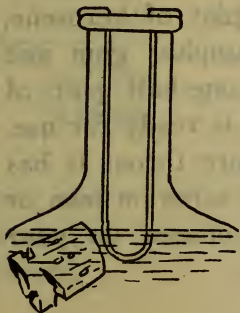
When the trouble is in the head bind it on the temple.

One application will effect a cure. Try it and be convinced.

When Eggs are Accidentally Broken.

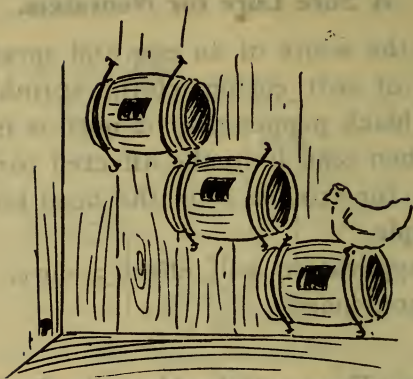
Place same in a glass or cup and cover with cold water which will prevent them from drying, and you will find them as good as fresh when ready to use.

To Keep Cork Out of the Way.



When you push the cork down into the medicine by mistake, use an old hairpin as shown in cut and notice how easily the contents will pour out after that.

Cheap Hen Nests.



Wire nail kegs to wall as shown in cut with number eight wire and a few staples. Bend wire around staple so the next can be taken down and cleaned when necessary. The holes sawed in the side are to aid in removing hens.

A Good Liniment for Man or Beast.

Put in a quart bottle a pint of kerosene, add five cents worth of camphor gum and let stand over night, add one-half pint of sweet oil, shake well and it is ready for use. For burns, stiff neck and sore throat it has no equal. It is fine for raw sores on man or beast. Try this valuable liniment on your horse's shoulders when sore.

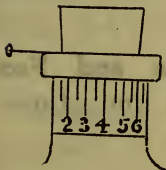
Sprains and Bruises.

If a lye is made by boiling wood ashes in a little water, and the feet or sprained place is bathed in this while warm, it will be found a splendid remedy. Keep the wounded member in the water, made as hot as it can be borne, for ten minutes. The lye must not be too strong.

Canning Corn.

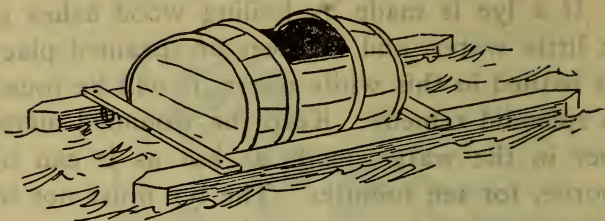
Cut corn off of cob and boil one-half hour, adding one teacup full of the juice of ripe tomatoes to every quart of corn. Seal while hot. Do not season until you open can to be used.

Bottle Indicator for Medicine.



Paste a strip of paper around neck of bottle. Print numbers from 1 to 12. If necessary to give the medicine on the half hour why place dot between. Stick pin in cork as shown in cut, and move around to the time when the next dose is to be given. Try it and be convinced.

Home-Made Boat



Cut a square hole 24 inches in a syrup barrel. Make frame of two boards one by 12, 10 feet long, with cross pieces as shown in cut. Nail barrel to frame.

Special Directions, in case of poisoning from **Arsenic, Corrosive Sublimate, Verdigris, Blue Vitrol** and from **Vegetables** kept in copper vessels.—Give emetic and white of egg, sweet oil and milk.

Sugar of Lead.—Give emetic and epsom salt.

Hemlock, Aconite, Belladonna and Fox Glove.—Give emetic then tannin and stimulants.

Opium, Laudanum and Morphine.—Give an emetic, follow with strong coffee or white of an egg. Keep patient walking two or three hours, and extremities warm.

Valuable Information in Case of Injury where a Physician Cannot be Secured.

A Shock.—If faint and cold, give stimulant in small doses, once in fifteen or twenty minutes, and secure warmth by external applications or rubbing.

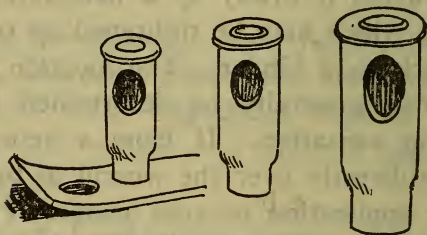
Bleeding from Wound.—If from an artery, stop the current of blood to the wound by putting a compress or cloth pad over the artery. Fasten it firmly by a handkerchief or bandage, which may be tightened by twisting in a thick as a binder. The location of the artery can generally be determined by the throbbing sensation. If from a vein, apply pressure directly over the wound or by exposure or application of cold water. Perchloride of Iron may be applied with cloth or lint. Keep the part elevated.

Wounds.—The part should be properly cleansed of all foreign matter, the edges brought together and fastened with strips of adhesive plaster; apply some anodyne solution; give stimulant, laudanum with Brandy, if necessary.

Bruises.—Apply tincture of arnica and worm-wood or hamamelis; keep well covered and warm.

Poisoned Wounds, from Bite of Animals.—Treatment should be prompt. If possible, suck the wound thoroughly two or three minutes; cauterize with either nitric acid, chloride of zinc or nitrate of silver, use whiskey internally.

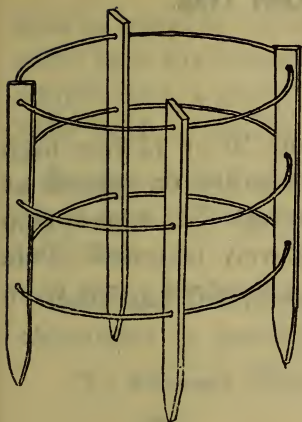
A Home-Made Leather Punch.



Can be easily made with a rifle cartridge shell, using the size shell desired. Holes cut in the side of the shell enables you to empty the shell of the leather without any trouble.

Poisons.—General Directions—Give an emetic as soon as possible; tablespoonful of powdered mustard in a tumbler of water, or twenty grains of ipecac, after vomiting, give freely of warm drinks.

Folding Tomato Vine Arbor.



Is made of laths and number eight wire and makes an ideal support for your tomatoes. After the season is over with, fold up and save until next season.

Removing a Bug Out of the Ear.

A bug in the ear is a very painful sensation. A lighted match held close to the ear will frequently cause the bug to come out. If convenient, a candle is better, and an electric light is still better. Sweet oil poured in the ear is a good remedy. It is very healing to the wound that the bug is so apt to leave.

Medical Suggestions for Emergencies.

Ague.—To prevent give five grains of quinine every morning. To cure move the bowels, give five grains of quinine three times a day and a vapor bath every evening.

Hawk and Owl Trap.



Set a pole 10 or 12 feet high with cleats nailed on side so as to climb to top. Set a steel trap on top, securely fastened. Pole should be a hundred yards from the house.

Dysentery.—Powder of opium, $\frac{1}{2}$ gr., and a teaspoonful of ipecacuanha, given every two hours.

Delirium Tremens.—Move the bowels; give beef tea every half hour. For a sleeping draught give 20 grains chloral dissolved in water.

Emetics.—An ounce of ipecacuanha wine, or 15 grains of sulphate of zinc in water, or a tablespoonful of salt, or a draught of mustard and water.

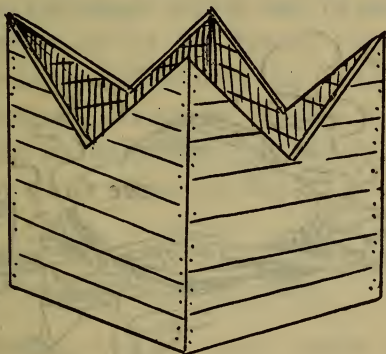
Fainting, from loss of blood, shock, or weakness.—Keep the body in a reclining position; loosen clothing; sprinkle face and neck

Bites of snakes, mad dogs, etc.—Stop the flow of blood to the heart with a cord or ligature; suck the wound, scratch the edges of the wound with a sharp pen-knife and apply carbolic acid or caustic to the wound.

Burns.—Apply cloths soaked in oil. Sweet oil is best. Keep burned member in natural position.

Colic and Diarrhoea.—Give twenty drops of chlorodine in brandy and water.

To Prevent Waste in Feeding Stock.



Make box five feet square, corner posts out of two by fours, five feet high, saw on the four sides as shown in cut. You will find it will prevent the cattle from wasting by tramping the fodder under foot, and will save you many dollars in a year's time.

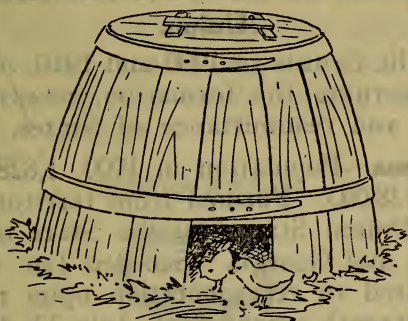
Rheumatism.—Wear dry apparel, avoid damp ground and alcoholic beverages. Celery is claimed to be a fine specific for the disease. Drink water in which celery cut into strips has been boiled. Put sweet milk, with a little flour and nutmeg, into a saucepan with boiled celery; serve it warm with toast; eat with potatoes.

To Remove a Large Rock.



Dig a small ditch around same and partly under the stone, then build a big fire on it. When thoroughly hot throw 4 or 5 buckets of cold water over it. This is safer and less expensive than blasting it out.

Home-Made Brooder.



Cut an old sugar barrel half in two, line inside with paper or old flannel cloth; at bottom cut hole as shown in cut. Chicks can be kept perfectly warm by placing a stone jug of boiling water inside. Jug should be refilled with hot water twice per day.

Sprains.—Use cold water cloths; keep limb in an elevated restful position.

Sunstroke.—Apply cold water to head; loosen clothes; move bowels.

Remedy for Ear Ache.

Moisten the end of your little finger with essence of oil of peppermint and rub gently in the outer opening of the ear.

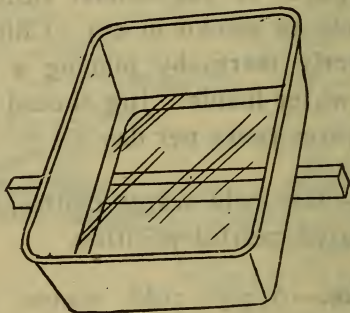
Historical and Geographical

Population of the States and Territories in the Union.

(From the Census of 1900 and 1910. Also data concerning the formation, secession, and readmittance of States.

Alabama—Population in 1900, 1,828,697; in 1910, 2,138,093. Formed from territory ceded to the United States by the State of South Carolina and Georgia. Seceded Jan. 11, 1861. Readmitted to representation upon ratifying the fourteenth amendment, July 13, 1868.

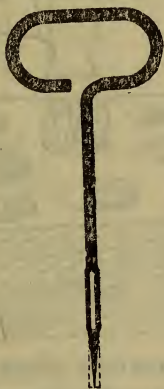
Cake Pan Bottom of Glass.



Cut the bottom of the pan out, leaving enough of an edge for the glass bottom to rest on. Cut glass to fit bottom. You will find it easy to keep clean and will enable one to examine the cake when baking.

Arizona—Population in 1900, 122,931; in 1910, 204,354. Formed from territory ceded to the United States by Mexico, part by the treaty of Guadalupe Hidalgo of Feb. 2, 1848, and part by what is known as the "Gadsden Purchase," in 1852.

Sewing Burlap.

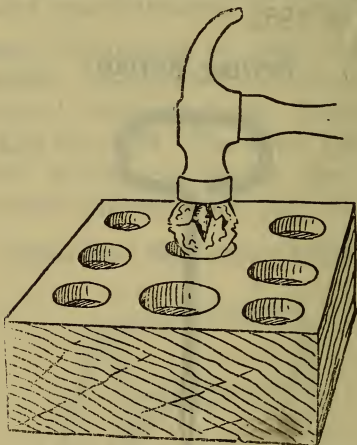


Grind a sharp point on a sardine can opener, and you will have a needle that will answer every purpose.

Arkansas—Population in 1900, 1,311,564; in 1910, 1, 574,449. Formed from a portion of the territory ceded to the United States by France, under the name of "Louisiana," by the treaty of Paris of 1803.

California—Population in 1900, 1,485,053; in 1910, 2, 377,549. Formed from territory ceded to the United States by Mexico by the treaty of Guadalupe Hidalgo of Feb. 2. 1848.

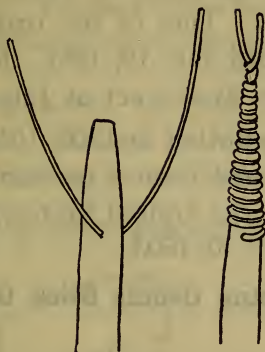
Homemade Nut Cracker.



Bore holes of various sizes about one-half inch deep into a block of wood as shown in cut.

Colorado—Population in 1900, 539,700; in 1910, 799,024. Formed from portions of the territory ceded to the United States by France by the treaty of April 30, 1803, and of that ceded by Mexico by the treaty of Guadalupe Hidalgo of Feb. 2, 1848.

Making Shoe Lace Tips.



Use fine wire and twist around the shoe string as shown in cut.

Connecticut—Population in 1900, 908,355; in 1910, 1,114,756. One of the original thirteen states.

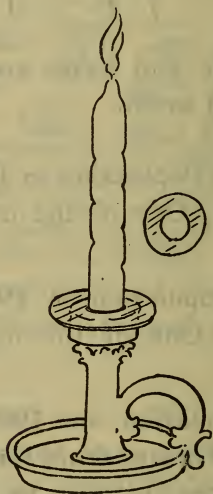
Delaware—Population in 1900, 184,735; in 1910, 202,322. One of the original thirteen states.

Florida—Population in 1900, 528,542; in 1910, 751,139. Formed from territory ceded to the United States by Spain by treaty of 1819. Seceded Jan. 11, 1861. Readmitted to representation upon ratifying the fourteenth amendment, June 25, 1868.

Georgia—Population in 1900, 2,216,331; in 1910, 2,609,121. One of the original thirteen states. Seceded Jan. 19, 1861. Readmitted to representation by the act of July 15, 1870.

Idaho—Population in 1900, 161,772; in 1910, 325,594. Formed from a portion of the territory ceded to the United States by France by treaty of April 30, 1803.

Keeping Candle Stick Clean.

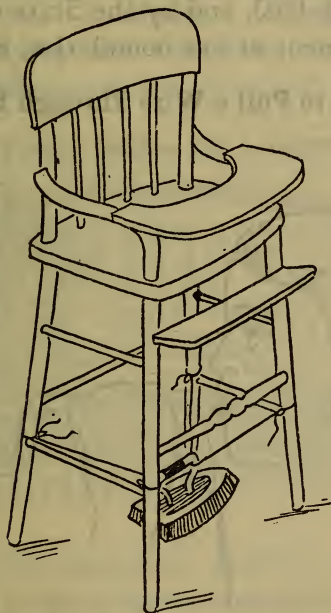


Easy way to keep your candle stick clean is to cut a washer made from mica, or tin, to fit around base of candle to catch the tallow as it falls.

Illinois—Population in 1900, 4,821,550; in 1910, 5,638,591. Formed from territory ceded to the United States by the State of Virginia.

Indiana—Population in 1900, 2,516,462; in 1910, 2,700,876. Formed from territory ceded to the United States by the State of Virginia.

To Prevent Baby From Overturning High Chair

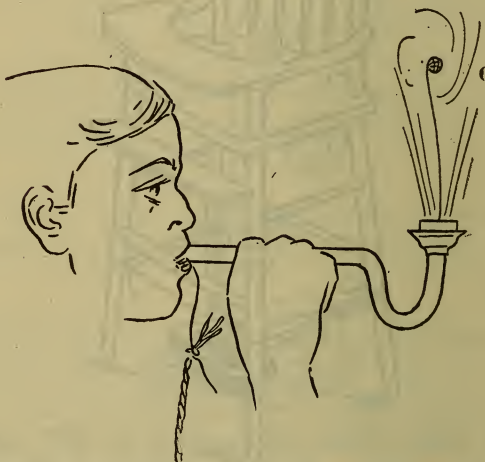


Anchor chair by hanging a flat iron to lower rounds as shown in cut.

Iowa—Population in 1900, 2,231,853; in 1910, 2, 224,771. Formed from a portion of the territory of Wisconsin, as the "Territory of Iowa," June 12, 1838.

Kansas—Population in 1900, 1, 495; in 1910, 1,690,949. Formed from territory ceded to the United States by France by the treaty of April 30, 1803, and by the State of Texas, in the settlement of her boundaries, in 1850.

Easy Way to Pull a Wire Through Bent Fixture

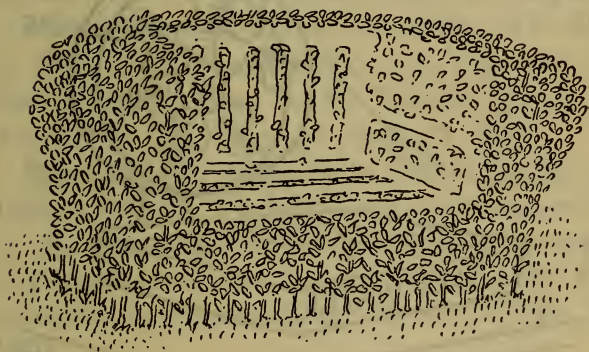


Roll a string into a small ball and blow it through the pipe. Tie end of the string to wire and pull through pipe as shown in cut.

Kentucky—Population in 1900, 2,147,174; in 1910, 2,289,905. Formed from a portion of the territory of the State of Virginia.

Louisiana—Population in 1900, 1,381,625; in 1910, 1,656,388. Formed from territory ceded to the United States by France under the treaty of Paris of April, 1803. Seceded January 26, 1861. Readmitted to representation upon ratifying the fourteenth amendment, July 9, 1868.

Pretty Settee for a Lawn.



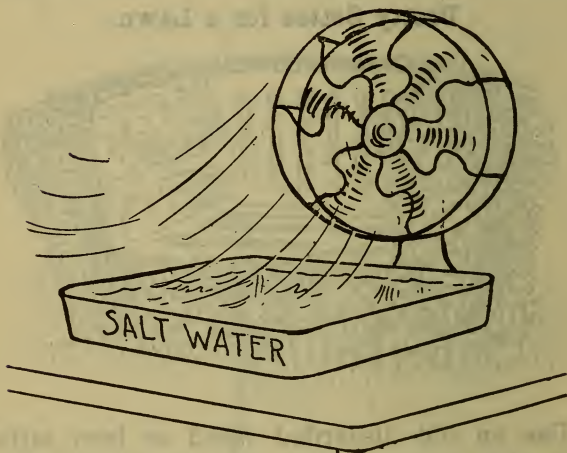
Use an old discarded wood or iron settee, and allow hedge to grow through it, trim from time to time, and it will only be a matter of a season or two before you will have something that is very useful as well as ornamental.

Maine—Population in 1900, 694,466; in 1910, 742,371. Formed from a portion of the territory of the State of Massachusetts.

Maryland—Population in 1900, 1,190,050; in 1910, 1,295,346. One of the original thirteen states.

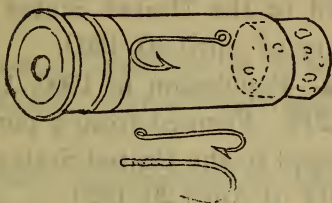
Massachusetts—Population in 1900, 2,805,346; in 1910, 3,366,416. One of the original thirteen states.

Imitation Sea Breeze.



Place shallow pan containing a saturated solution of salt before your electric fan; with fan tilted so air blows into the water.

Safe Way to Carry Fish Hooks.



Take an empty shot gun shell and fit cork in the end as shown in cut.

Michigan—Population in 1900, 2,420,982; in 1910, 2,810,173. Formed from territory ceded to the United States by the State of Virginia.

Minnesota—Population in 1900, 1,751,394; in 1910, 2,075,708. Formed from a portion of the territory ceded to the United States by France by the treaty of April 30, 1803.

Mississippi—Population in 1900, 1,551,270; in 1910, 1,797,114. Formed from territory ceded to the United States by the states of Georgia and South Carolina. Seceded Jan. 9, 1861. Re-admitted to representation by act of Feb. 23, 1870.

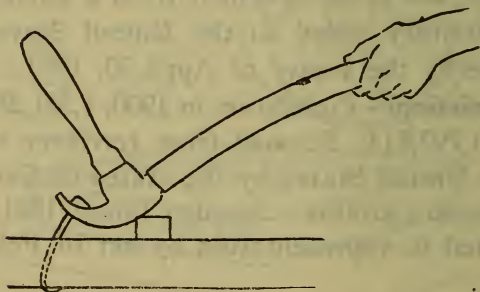
Missouri—Population in 1900, 3,106,665; in 1910, 3,293,335. Formed from a portion of the territory ceded to the United States by France, under the name of "Louisiana," by the treaty of Paris of 1803.

Montana—Population in 1900, 243,329; in 1910, 376,053. Formed of a portion of the territory ceded to the United States by France by the treaty of April 30, 1803.

Nebraska—Population in 1900, 1,066,300; in 1910, 1,192,214. Formed from a portion of the territory ceded to the United States by France by the treaty of April 20, 1803.

Nevada—Population in 1900, 42,335; in 1910, 81,875. Formed from a portion of the territory ceded to the United States by Mexico by the treaty of Guadalupe Hidalgo of Feb. 2, 1848.

Handy Tool for Pulling Spikes.



To overcome the danger of breaking handle of hammer while pulling spikes, bring into use a piece of old gas pipe 20 inches long and proceed as shown in cut.

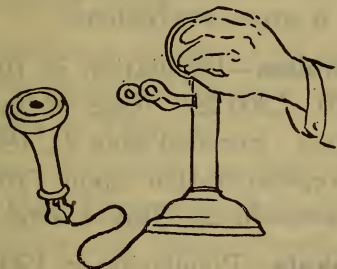
New Hampshire—Population in 1900, 411,588; in 1910, 430,572. One of the original thirteen states.

New Jersey—Population in 1900, 1,883,669; in 1910, 2,537,167. One of the original thirteen states.

New Mexico—Population in 1900, 195,310; in 1910, 327,301. Formed from a portion of the territory ceded to the United States by Mexico by the treaty of Guadalupe Hidalgo of Feb. 2, 1848.

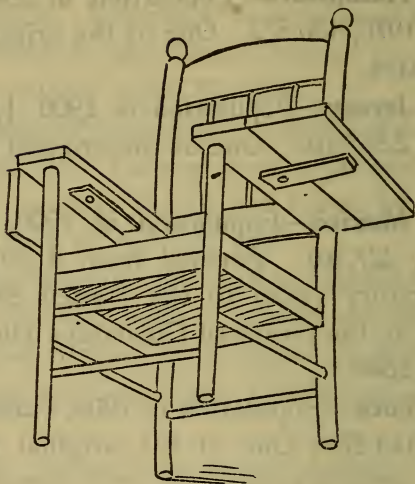
New York—Population in 1900, 7,268,012; in 1910, 9,113,279; One of the original thirteen states.

To Hear Better Over a Telephone.



Place hand over transmitter while listening; by so doing you will overcome any local noise and will be able to hear much better what is being said.

A Good Kitchen Chair.

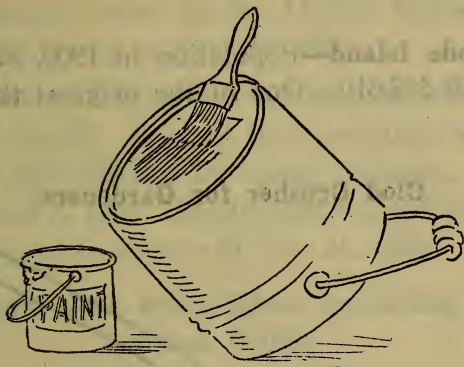


Hinge arms on as shown in cut. Very little trouble to make, and the busy housewife will find it a great convenience.

North Carolina—Population in 1900, 1,893,810; in 1910, 2,206,287. One of the original thirteen states. Seceded May 21, 1861. Readmitted to representation upon ratifying the fourteenth amendment, July 4, 1868.

North Dakota—Population in 1900, 319,316; in 1910, 577,056. Formed from a portion of the territory ceded to the United States by France by treaty of April 30, 1803.

To Repair Leak in a Bucket.



Daub a little paint over the leak on the inside and stick a small piece of cloth over it. After the paint is thoroughly dry, apply two more coats of paint, and you will have a bucket that will last for years.

Ohio—Population in 1900, 4,157,545; in 1910, 4,767,121. Formed from territory ceded to the United States of Virginia.

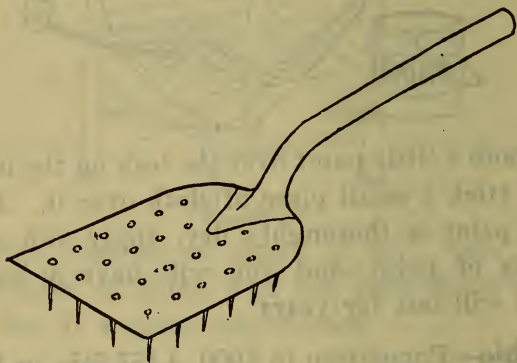
Oklahoma—Population in 1900, 398,331; in 1910, 1,657,155. Formed by the union of Oklahoma Territory and Indian Territory.

Oregon—Population in 1900, 413,516; in 1910, 672,765. Formed from territory ceded of April 30, the treaty with Great Britain of June 15, 1846.

Pennsylvania—Population in 1900, 6,302,115; in 1910, 7,665,000. One of the original thirteen states.

Rhode Island—Population in 1900, 428,553; in 1910 542,610. One of the original thirteen states.

Clod Crusher for Gardeners.



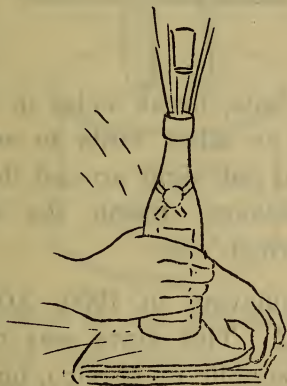
Have your local blacksmith to flatten out an old worn out shovel and rivet 16-penny nails into it, as shown in cut.

South Carolina—Population in 1900, 1,340,316; in 1910, 1,515,400. One of the original thirteen states. Seceded Dec. 20, 1860. Re-admitted to representation upon ratifying the fourteenth amendment, July 9, 1868.

South Dakota—Population in 1900, 401,570; in 1910, 583,888. Formed from a portion of the territory ceded to the United States by France by treaty of April 30, 1803.

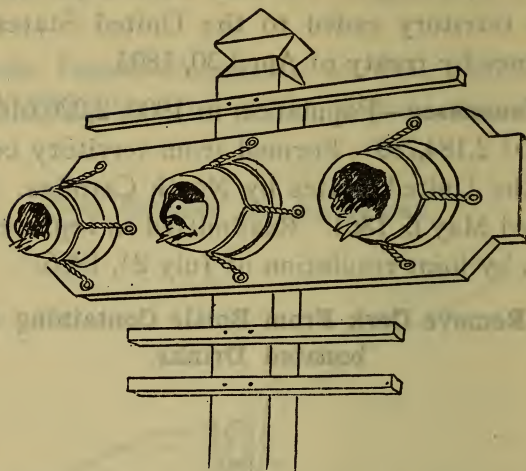
Tennessee—Population in 1900, 2,020,616; in 1910, 2,184,789. Formed from territory ceded to the United States by North Carolina. Seceded May 6, 1861. Readmitted to representation by joint resolution of July 24, 1866.

To Remove Cork From Bottle Containing Carbonated Drinks.



Make pad by folding towel eight times. Place the pad on the table and strike bottle with repeated blows as shown in 'cut.

Bird Houses.

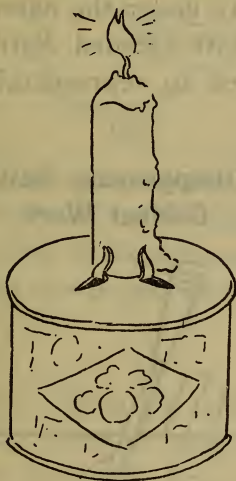


Use flower pots, break holes in the bottom large enough to allow birds to enter. Take No. 6 wire and pull tight around the pots with a pair of pinchers. Staple the wire to the board as shown in cut.

Texas—Population in 1900, 3,048,710; in 1910, 3,896,542. This state was originally a part of the Republic of Mexico, but by a successful revolt the people established for themselves an independent republican government, and were subsequently annexed to the United States. Seceded Feb. 1, 1861. Readmitted to representation by the act of March 30, 1870.

Utah—Population in 1900, 276,749; in 1910, 373,351. Formed from a portion of the territory ceded to the United States by Mexico by the treaty of Guadalupe Hidalgo of Feb. 2, 1848.

Homemade Candle Stick.

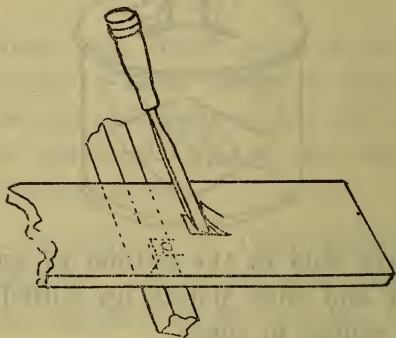


Cut three slits in the bottom of an old tomato can and turn points up sufficiently to hold the candle in place.

Vermont—Population in 1900, 343,641; in 1910, 355,956. Formed from a portion of the territory of the State of New York.

Virginia—Population in 1900, 1,854,184; in 1910, 2,061,612. One of the original thirteen states. The area of Virginia at the date of ratification was 61,352 square miles, but Dec. 31, 1862, a portion of its territory was set off and admitted into the Union as a free and independent state under the name of West Virginia. The state seceded April 17, 1861, and was readmitted to representation by act of Jan. 26, 1870.

To Drive a Disappearing Nail in High-Class Cabinet Work.



Lift wood with chisel along with the grain. Drive in nail with nail punch, sticking the cut down with glue; sandpaper off, and it will be impossible to detect where the nail was driven in.

To Repair Hot Water Bags.



Don't throw away your old hot water bags, as they can be easily made almost new, by using several coats of liquid court plaster, letting each court dry before putting on the next one.

Washington—Population in 1900, 518,103; in 1910, 1,141,990. Formed from territory ceded to the United States by France by treaty of April 30, 1803. The northern boundary of the territory was settled by a treaty with Great Britain, known as the "Oregon Treaty," of June 15, 1846.

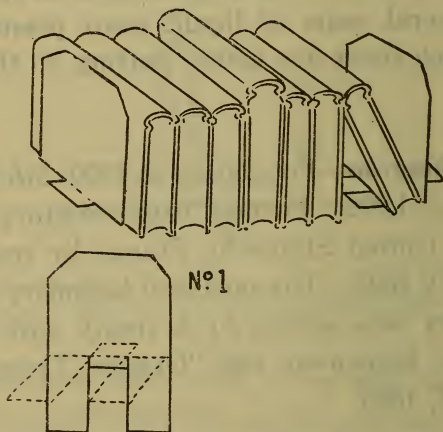
West Virginia—Population in 1900, 958,800; in 1910, 1,221,119. Formed from a portion of the territory of the State of Virginia.

Wisconsin—Population in 1900, 2,069,042; in 1910, 2,333,860. Formed from a portion of the territory of the State of Michigan, as the "Territory of Wisconsin," April 20, 1836.

Wyoming—Population in 1900, 92,531; in 1910, 145,965. Formed from a portion of the territory ceded to the United States by France by treaty of April 30, 1803.

District of Columbia—Population in 1900, 278,718; in 1910, 331,069. The District of Columbia was established under the 17th clause

Homemade Book Rack.



Cut a piece of galvanized iron, or heavy tin, as shown in cut No. 1. Bend the two pieces as per dotted lines. Size of iron to be 15x7.

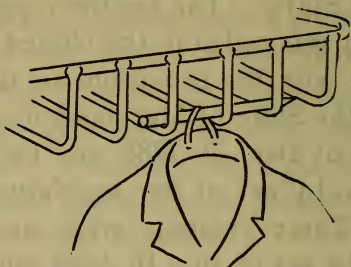
8th section 1st article of the Constitution of the United States. The territory embraced in the District was ceded to the United States, in accordance with the provisions of the Constitution, by the State of Maryland, by act of her legislature of Dec. 23, 1788, and by the State of Virginia, by act of her legislature of Dec. 3, 1789. These cessions were accepted by Congress, by act of July 16, 1790, and the lines and bounds of the District were established by a proclamation of the President, George Washington, March 30, 1791. By an act of July 9, 1846, Congress retroceded the county of Alexandria, in the District of Columbia, to the State of Virginia. The present government of the District is administered by a board of three Commissioners, appointed by the President, in pursuance of an act of Congress of June 20, 1874.

To Mend a Pot Cover.



Use empty spool ,and start screw from under side of the cover ...up into the spool.

Good Coat Hanger.



When traveling on a train, hang on a lead pencil, place over two or more of the bars in rack overhead as shown in cut.

Alaska—Population in 1900, 63,592; in 1910, 645,356. Formed from territory ceded to the United States by Russia, by treaty of March 30, 1867.

Hawaii—Population in 1900, 154,001; in 1910, 191,909. Formed from the territory of the Republic of Hawaii, annexed to the United States by act of Congress of July 7, 1898.

Porto Rico—Population in 1900, 953,243; in 1910, 1,118,012. Taken possession of by the United States Oct. 18, 1898.

Military and Naval Services in 1900, 91,219; in 1910, 55,607.

Total population for Continental United States in 1900, 75,994,575; in 1910, 91,972,267.

Total population, including Alaska, Hawaii and Porto Rico, in 1900, 77,256,430; in 1910, 93,402,151.

A census of the Philippine Islands was taken in 1903 by the United States government, and the population turned in was 7,635,426.

Planting Early Seeds.



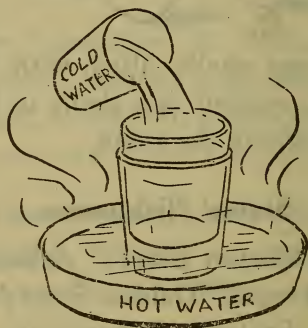
Plant in egg shells filled with dirt, when seeds are up, replant egg shells in the ground without disturbing the roots.

States' Nicknames.

Alabama, "Cotton State;" Arkansas, "Bear State;" California, "Golden State;" Colorado, "Centennial State;" Connecticut, "Nutmeg State;" Delaware, "Blue Hen State;" Florida, "Peninsula State!" Georgia, "Cracker State;"

Illinois, "Prairie State;" Indiana, "Hoosier State;" Iowa, "Hawkeye State;" Kansas, "Sunflower State;" Kentucky, "Blue Grass State;" Louisiana, "Pelican or Creole State;" Maine, "Pine Tree State;" Maryland, "Old Line State;" Massachusetts, "Bay State;" Michigan, "Wolverine;" Minnesota, "Gopher State;" Mississippi, "Bayou State;" Montana, "Stubtoe State;" Nebraska, "Black Water State;" Nevada, "Silver State;" New Hampshire, "Granite State;" New Jersey, "Jersey Blue State;" New York, "Empire;" North Carolina, "Tar State;" North Dakota, "Flickertail State;" Ohio, "Buckeye State;" Okla-

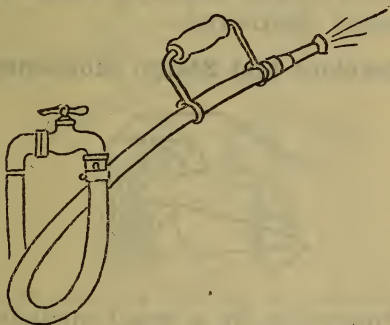
To Separate Glasses When Stuck Together.



Set glasses in a pan of warm water and pour cold water in the top glass.

homa, "Sunset State;" Oregon, "Beaver State;" Pennsylvania, "Keystone State;" Rhode Island, "Little Rhody State;" South Carolina, "Palmetto State;" South Dakota, "Swingecat or Coyote State;" Tennessee "Volunteer State;" Texas, "Lone Star State;" Utah, Mormon State;" Vermont, "Green Mountain State;" Virginia, "Old Dominion;" Wisconsin, "Badger;" Washington, "Chinook State;" West Virginia, "Panhandle State."

Handle for Hose.



Take the handle off a lard tub or an old bucket and bend the wire around hose as shown in cut.

Stumps—To Remove.

One method is as follows: In the fall of the year bore a 1-inch hole 18 inches deep

Interesting and Instructive

into the center of the stump and put in an ounce of saltpetre, filling up with water, and plugging the hole up. In the spring take out the plug, put in half a gill of kerosene and set fire to it. It will burn the stump out to its farthest root. Here is another plan: In the fall, with an inch auger, bore a hole in the centre of the stump 10 inches deep, and put into it a $\frac{1}{2}$ -lb. of vitriol, and cork the hole up very tight. In the spring the whole stump and roots extending all through their ramifications will be found so rotten that they can be easily destroyed.

Envelope and Stamp Moistener.



Cut a sponge to fit a small medicine bottle or vial as shown in cut. Fill with water and you will find that it will answer every purpose.

The Great Salt Lake.

Floating, difficult in fresh water and something of an art in the sea, becomes in the

Great Salt Lake a condition impossible to avoid. Lie down and you lie half above the surface; enter it below your depth and you walk along after you have sunk to your arm-pits, provided only you can keep your balance. No one ever drowned in it, although there have been deaths from strangulation; a gallon of it boiled yields a quart of salt. Orson Pratt, the first permanent white settler on its shore, swam in it on July 26, 1847.

Homemade Flower Stand.



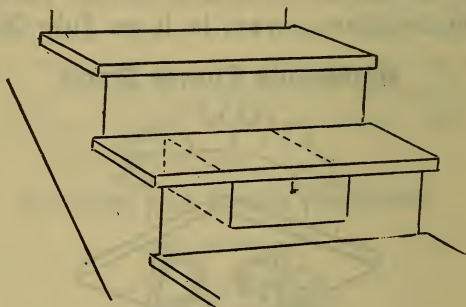
Use four clothes hooks as shown in cut. Easy to make and inexpensive.

The World's Oldest Book.

Max Muller, the eminent German linguist who was employed by the British East India company to translate the Las Vegas into English, thought it the oldest book in the

world. It is believed to have been in existence, complete as we have it now, more than 1,500 years before Christ. Its claims to this distinction are only disputed by the so-called "Book of the Dead" from Egypt, consisting of many fragments, some of which date back to 6,000 B. C.

Secret Drawer.



Can be built in a step in the stairs with very little trouble and at a very small cost.

Languages of the World.

There are said to be 3,424 spoken languages or dialects in the world. These are distributed as follows:

America 1,624; Asia 937; Europe 587; Africa 276.

The English language is spoken by more than 150,000,000 of people.

The German more than 120,000,000 people.

The Russian more than 90,000,000 people.

The French more than 60,000,000.

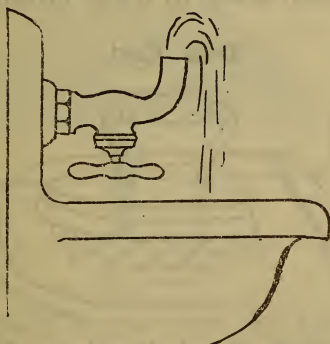
The Spanish more than 55,000,000 people.

The Italian more than 40,000,000 people.

The Portuguese more than 30,000,000 people.

The English language contains approximately 600,000 words. Of this total nearly one-half consists of scientific terminology seldom met outside of text-books and of archaic, obsolescent or obsolete terms.

Sanitary Fount.

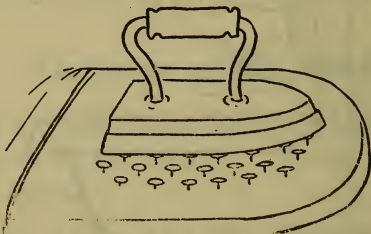


Turn faucet upside down with a wrench.

Oceans Depth.

The greatest known depth of the sea is the South Atlantic Ocean, midway between the Island of Tristan d'Acunha and the mouth of the Rio de la Plata. The bottom was there reached at a depth of 20,236 feet, or seven and three-fifths miles. In the North Atlantic Ocean, south of Newfoundland, soundings have been made to a depth of 4,580 fathoms or 27,480 feet, while depths equaling 34,000 feet, or six and a half miles, are reported south of the Bermuda Islands. The average depth of the Pacific Ocean, between Japan and California, is a little over 2,000 fathoms; between Chile and the Sandwich Islands, 2,500 fathoms, and between Chile and New Zealand, 1,500 fathoms. The average depth of all the oceans is from 2,000 to 2,500 fathoms.

Iron Rest.

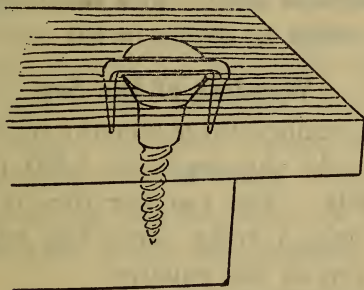


Drive small flat-headed nails in the board.

Where Four States Meet.

In the United States there is but one "four corners" where four States and Territories join. More than this, it is the only place of its kind in the world. This point, upon a spur of the Carizo Mountains, is the one where Colorado, Utah, New Mexico and Arizona join. At no other place on the globe do we find four States Territories or provinces uniting to form such a junction. This spot is not easy of access, and few tourists ever see it, yet a monument stands at the point, erected by United States surveyors and inscribed with the names of the States and Territories whose boundaries meet there. The point is reach-

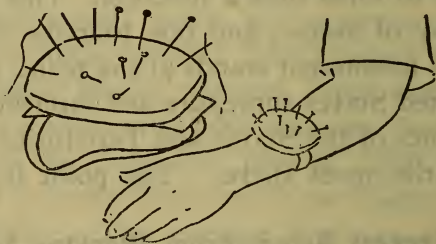
To Prevent Screw From Working Loose.



Drive a small staple over the head, fitting into the slot as shown in cut.

ed by a trail from the road leading from Navajo Springs in Colorado, in the Ute Indian Reservation, to the San Juan River. The trail leaves the road and crosses the river near Scott's trading-post in Utah, and leads to the monument, which is of the usual type erected by Government surveyors to mark State corners.

Handy Pin Cushion.



Sew piece of elastic to a small pin cushion to fit the wrist as shown in cut.

Wonders of the Sea.

Oceans occupy three-fourths of the earth's surface. At the depth of 3,500 feet waves are not felt. The temperature is the same, varying only a trifle, from the poles to the burning sun of the equator.

A mile down the water has a pressure of a ton on every square inch. If a box six feet

deep were filled with sea water and allowed to evaporate, there would be two inches of salt left on the bottom of the box. Taking the average depth of the oceans of the world to be three miles, there would be a layer of salt 230 feet thick over the entire bed should the water evaporate. The water of the ocean is colder at the bottom than at the surface. In many places, especially in the bays on the coast of Norway, the water freezes at the bottom before it does above.

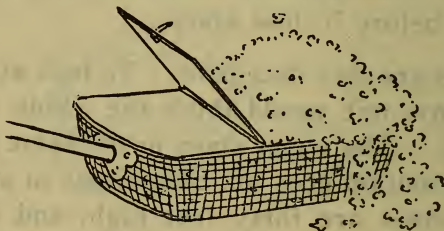
Waves are very deceptive. To look at them in a storm one would think the whole water traveled. The water stays in the same place, but the motion goes on. Sometimes in storms these waves are forty feet high, and travel fifty miles per hour—nearly twice as fast as the fleetest steamship. The base of a wave—the distance from valley to valley on either side at the bottom—is generally reckoned as being fifteen times the height, therefore, an average wave, say one 25 feet high, has a base extending over 375 feet. The force of waves breaking on the shore is said to be seventeen tons to the square yard.

The State Capitol of Texas

is the largest state building in the United States

States and the seventh in size among the buildings of the world. It is a vast Greek cross of red Texas granite, with a central rotunda covered by a dome 311 feet high. It was begun in 1881 and finished in 1888, having cost about \$3,500,000. It was paid for with 3,000,000 acres of public land, deeded to the capitalists who executed the work.

Easy Way to Pop Corn.



Drench the pop corn in water before placing over the fire and every grain will pop.

Interesting Facts.

There are 2,750 languages.

America was discovered in 1492.

A square mile contains 640 acres.

Envelopes were first used in 1839.

Telescopes were invented in 1590.

A barrel of rice weighs 600 pounds.

A barrel of flour weighs 196 pounds.

Tightening a Curtain Pole.



Use a common table fork as shown in cut.

The Largest Map in the World.

The largest map in the world is the ordinance survey map of England, containing over 108,000 sheets, and costing about \$1,000,000 a year for twenty years. The scale varies from ten feet to one-tenth of an inch to a mile. The details are so minute that maps having a scale of twenty-five inches show every hedge, fence, wall, building, and even every isolated tree in the country. The plans show not only the exact shape of every building, but of every porch, area, doorstep, lamppost, railway and fireplug.

Ezekiel's reed was nearly 11 feet; a cubit was nearly 22 inches; a hand's breadth is equal to 35-8 inches; a finger's breadth is equal to a little less than 1 inch; an ephah, or bath, contained 4 gallons and 5 pints; a hin was 3 quarts and 3 pints; an omer was 6 pints; a cab was 5 pints.

FARMERS' BULLETINS.

Bulletins in this list will be sent free, so long as the supply lasts, to any resident of the United States, on application to his **Senator, Representative, or Delegate in Congress**, or to the **Secretary of Agriculture**, Washington, D. C. Because of the limited supply, applicants are urged to select only a few numbers, choosing those which are of special interest to them. The bulletins entitled "Experiment Station Work" give briefly the results of experiments performed by the State experiment stations.

22. The Feeding of Farm Animals.
27. Flax for Seed and Fiber.
28. Weeds: And How to Kill Them.
30. Grape Diseases on the Pacific Coast
32. Silos and Silage.
34. Meats: Composition and Cooking.
35. Potato Culture.
36. Cotton Seed and Its Products.
42. Facts About Milk.
44. Commercial Fertilizers.
47. Insects Affecting the Cotton Plant.
48. The Manuring of Cotton.
49. Sheep Feeding.
51. Standard Varieties of Chickens.
52. The Sugar Beet.
54. Some Common Birds.
55. The Dairy Herd.
56. Experiment Station Work—I.
60. Methods of Curing Tobacco.
61. Asparagus Culture.
62. Marketing Farm Produce.
63. Care of Milk on the Farm.
64. Ducks and Geese.
65. Experiment Station Work—II.
69. Experiment Station Work—III.
71. Essentials in Beef Production.
73. Experiment Station Work—IV.
77. The Liming of Soils.
78. Experiment Station Work—V.
79. Experiment Station Work—VI.
81. Corn Culture in the South.
82. The Culture of Tobacco.
83. Tobacco Soils.
84. Experiment Station Work—VII.
85. Fish as Food.

86. Thirty Poisonous Plants.
87. Experiment Station Work—VII.
88. Alkali Lands.
91. Potato Diseases and Treatment.
92. Experiment Station Work—IX.
93. Sugar as Food.
96. Raising Sheep for Mutton.
97. Experiment Station Work—X.
99. Insect Enemies of Shade Trees.
100. Hog Raising in the South.
101. Millets.
103. Experiment Station Work—XI.
104. Notes on Frost.
105. Experiment Station Work—XII.
106. Breeds of Dairy Cattle.
107. Experiment Station Work—XIII.
110. Rice Culture in the United States.
112. Bread and Bread Making.
113. The Apple and How to Grow It.
114. Experiment Station Work—XIV.
118. Grape Growing in the South.
119. Experiment Station Work—XV.
120. Insects Affecting Tobacco.
121. Beans, Peas, and Other Legumes as Food.
122. Experiment Station Work—XVI.
124. Experiment Station Work—XVII.
126. Practical Suggestions for Farm Buildings.
127. Important Insecticides.
128. Eggs and Their Uses as Food.
131. Household Tests for Detection of Oleomargarine and Renovated Butter.
132. Insect Enemies of Growing Wheat.
133. Experiment Station Work—XVIII.
134. Tree Planting on Rural School Grounds.
135. Sorghum Sirup Manufacture.
137. The Angora Goat.
138. Irrigation in Field and Garden.
139. Emmer: A Grain for the Semiarid Regions.
140. Pineapple Growing.
142. Principles of Nutrition and Nutritive Value of Food.
144. Experiment Station Work—XIX.
145. Carbon Bisulphid as an Insecticide.
149. Experiment Station Work—XX.
150. Clearing New Land.
152. Scabies of Cattle.
154. The Home Fruit Garden: Preparation and Care.
155. How Insects Affect Health in Rural Districts.
156. The Home Vineyard.
157. The Propagation of Plants.
158. How to Build Small Irrigation Ditches.
162. Experiment Station Work—XXI.
164. Rape as a Forage Crop.
165. Silkworm Culture.
166. Cheese Making on the Farm.
167. Cassava.
169. Experiment Station Work—XXII.
170. Principles of Horse Feeding.
172. Scale Insects and Mites on Citrus Trees.
173. Primer of Forestry. Part I: The Bush.
174. Broom Corn.

175. Home Manufacture and Use of Unfermented Grape Juice.
176. Cranberry Culture.
177. Squab Raising.
178. Insects Injurious in Cranberry Culture.
179. Horseshoeing.
181. Pruning.
182. Poultry as Food.
183. Meat on the Farm: Butchering, Curing and Keeping.
185. Beautifying the Home Grounds.
186. Experiment Station Work—XXIII.
187. Drainage of Farm Lands.
188. Weeds Used in Medicine.
190. Experiment Station Work—XXIV.
192. Barnyard Manure.
193. Experiment Station Work—XXV..
194. Alfalfa Seed.
195. Annual Flowering Plants.
196. Usefulness of the American Toad.
197. Importation of Game Birds and Eggs for Propagation.
198. Strawberries.
199. Corn Growing.
200. Turkeys.
201. Cream Separator on Western Farms.
202. Experiment Station Work—XXVI.
203. Canned Fruits, Preserves, and Jellies.
204. The Cultivation of Mushrooms.
205. Pig Management.
206. Milk Fever and Its Treatment.
209. Controlling the Boll Weevil in Cotton Seed and at Ginneries.
210. Experiment Station Work—XXVII.
211. The Use of Paris Green in Controlling the Cotton Boll Weev'l.
213. Raspberries.
217. Essential Steps in Securing an Early Crop of Cotton.
218. The School Garden.
219. Lessons from the Grain Rust Epidemic of 1904.
220. Tomatoes.
221. Fungous Diseases of the Cranberry.
222. Experiment Station Work—XXVIII.
223. Miscellaneous Cotton Insects in Texas.
224. Canadian Field Peas.
225. Experiment Station Work—XXIX.
227. Experiment Station Work—XXX.
228. Forest Planting and Farm Management.
229. The Production of Good Seed Corn.
231. Spraying for Cucumber and Melon Diseases.
232. Okra: Its Culture and Uses.
233. Experiment Station Work—XXXI.
234. The Guinea Fowl.
232. Preparation of Cement Concrete.
236. Incubation and Incubators.
237. Experiment Station Work—XXXII.
238. Citrus Fruit Growing in the Gulf States.
239. The Corrosion of Fence Wire.
241. Butter Making on the Farm.
242. An Example of Model Farming.
243. Fungicides and Their Use in Preventing Diseases of Fruits.
244. Experiment Station Work—XXXIII.
245. Renovation of Worn-out Soils.
246. Saccharine Sorghums for Forage.
248. The Lawn.

249. Cereal Breakfast Foods.
250. The Prevention of Stinking Smut on Wheat and Loose Smut of Oats.
251. Experiment Station Work—XXXIV.
252. Maple Sugar and Sirup.
253. The Germination of Seed Corn.
254. Cucumbers.
255. The Home Vegetable Garden.
256. Preparation of Vegetables for the Table.
257. Soil Fertility.
258. Texas or Tick Fever and its Prevention.
259. Experiment Station Work—XXXV.
260. Seed of Red Clover and its Impurities.
262. Experiment Station Work—XXXVI.
263. Practical Information for Beginners in Irrigation.
264. The Brown-tail Moth and How to Control It.
266. Management of Soils to Conserve Moisture.
267. Experiment Station Work—XXXVII.
268. Industrial Alcohol: Sources and Manufacture.
269. Industrial Alcohol: Uses and Statistics.
270. Modern Conveniences for the Farm Home.
271. Forage Crop Practises in Western Oregon and Western Washington.
272. A Successful Hog and Seed-corn Farm.
273. Experiment Station Work—XXXVIII.
274. Flax Culture.
275. The Gypsy Moth and How to Control It.
276. Experiment Station Work—XXXIX.
277. The Use of Alcohol and Gasoline in Farm Engines.
279. A Method of Eradicating Johnson Grass.
280. A Profitable Tenant Dairy Farm.
281. Experiment Station Work—XL.
282. Celery.
283. Spraying for Apple Diseases and the Coddling Moth in the Ozarks.
284. Insect and Fungous Enemies of the Grape East of the Rocky Mountains.
285. The Advantage of Planting Heavy Cotton Seed.
286. Comparative Value of Whole Cotton Seed and Cotton-seed Meal in Fertilizing Cotton.
287. Poultry Management.
288. Nonsaccharine Sorghums.
289. Beans.
290. The Cotton Bollworm.
291. Evaporation of Apples.
292. Cost of Filling Silos.
293. Use of Fruit as a Food.
294. Farm Practice in the Columbia Basin Uplands.
295. Potatoes and Other Root Crops as Food.
296. Experiment Station Work—XLI.
298. Food Value of Corn and Corn Products.
299. Diversified Farming Under the Plantation System.
300. Some Important Grasses and Forage Plants for the Gulf Coast Region.
301. Home-grown Tea.
302. Sea Island Cotton: Its Culture, Improvement and Diseases.
303. Corn Harvesting Machinery.
304. Growing and Curing Hops.
305. Experiment Station Work—XLII.
306. Dodder in Relation to Farm Seeds.

307. Roselle: Its Culture and Uses.
309. Experiment Station Work—XLIII.
310. A Successful Alabama Diversification Farm.
311. Sand-clay and Burnt-clay Roads.
312. A Successful Southern Hay Farm.
313. Harvesting and Storing Corn.
314. A Method of Breeding Early Cotton to Escape Boll-Weevil Damage.
315. Progress in Legume Inoculation.
316. Experiment Station Work—XLIV.
317. Experiment Station Work—XLV.
318. Cowpeas.
319. Demonstration Work in Cooperation with Southern Farmers
320. Experiment Station Work—XLVI.
321. The Use of the Split-log Drag on Earth Roads.
322. Milo as a Dry-land Grain Crop.
323. Clover Farming on the Sandy Jack-pine Lands of the North.
324. Sweet Potatoes.
325. Small Farms in the Corn Belt.
326. Building up a Run-down Cotton Plantation.
328. Silver Fox Farming.
329. Experiment Station Work—XLVII.
330. Deer Farming in the United States.
331. Forage Crops for Hogs in Kansas and Oklahoma.
332. Nuts and Their Uses as Food.
333. Cotton Wilt.
334. Experiment Station Work—XLVII.
335. Harmful and Beneficial Mammals of the Arid Interior.
337. Cropping Systems for New England Dairy Farms.
338. Macadam Roads.
339. Alfalfa.
341. The Basket Willow.
342. Experiment Station Work—XLIX.
343. The Cultivation of Tobacco in Kentucky and Tennessee.
344. The Boll Weevil Problem, with Special Reference to Means of Reducing Damage.
345. Some Common Disinfectants.
346. The Computation of Rations for Farm Animals by the Use of Energy Values.
347. The Repair of Farm Equipment.
348. Bacteria in Milk.
349. The Dairy Industry in the South.
350. The Dehorning of Cattle.
351. The Tuberculin Test of Cattle for Tuberculosis.
352. The Nevada Mouse Plague of 1907-8.
353. Experiment Station Work—L.
354. Onion Culture.
355. A Successful Dairy Farm.
356. Peanuts.
357. Methods of Poultry Management at the Maine Agricultural Experiment Station.
358. A Primer of Forestry. Part II: Practical Forestry.
359. Canning Vegetables in the Home.
360. Experiment Station Work—LI.
361. Meadow Fescue: Its Culture and Uses.
362. Conditions Affecting the Value of Market Hay.
363. The Use of Milk as Food.
364. A Profitable Cotton Farm.
365. Farm Management in Northern Potato growing Sections.
366. Experiment Station Work—LII.

- 367. Lightning and Lightning Conductors.
- 368. The Eradication of Bindweed, or Wild Morning-glory.
- 369. How to Destroy Rats.
- 370. Replanning a Farm for Profit.
- 371. Drainage of Irrigated Lands.
- 372. Soy Beans.
- 373. Irrigation of Alfalfa.
- 374. Experiment Station Work—LIII.
- 375. Care of Food in the Home.
- 376. Game Laws for 1909.
- 377. Harmfulness of Headache Mixtures.
- 378. Methods of Exterminating the Texas-fever Tick.
- 379. Hog Cholera.
- 380. The Loco-weed Disease.
- 381. Experiment Station Work—LIV.
- 382. The Adulteration of Forage-plant Seeds.
- 383. How to Destroy English Sparrows.
- 384. Experiment Station Work—LV.
- 385. Boys' and Girls' Agricultural Clubs.
- 386. Potato Culture on Irrigated Farms of the West.
- 387. The Preservative Treatment of Farm Timbers.
- 388. Experiment Station Work—LVI.
- 389. Bread and Bread Making.
- 390. Pheasant Raising in the United States.
- 391. Economical Use of Meat in the Home.
- 392. Irrigation of Sugar Beets.
- 393. Hatching and Rearing Ag...

INDEX

Accidents—In case of	103
Adjuster—A drop light	90
Alaska—Population of	132
Alabaster—To clean	24
Alabama, Population of	110
Arizona—Population of	111
Arkansas—Population of	111
Auger Stop—Simple	45
Automobile—To pull out of mud	59
Axle—To mend broken	43
Bag Holder—Home made	64
Balky Horse—Remedy for	62
Barbed Wire Cuts—A remedy for	94
Bath—A home-made shower	27
Bed Pocket—Home made for invalid	84
Beef—To preserve without ice	32
Bees—To trap	16
Bird Houses	126
Black Silk—To clean easy	24
Boat—A home-made	102
Bolts—To keep tight	46
Book Rack—To make	130
Bottle Indicator for Medicine	101
Bread—Cutting loaf	7
Bread—To cut hot	29
Brooder—A home-made	109
Bruises—For	101
Brush—To preserve paint	46
Bucket—To repair leak in	123
Bulletins—Farmers	146
Bug—To remove from ear	105
Bugs—A good remedy for	58
Burlap Needle—A good	111
Buttons—To hold on	38
Buttons—To keep on overalls	33
Button Hole—For worn-out collar	86
Butter—To purify	17
Cake—To remove from pan	32

Cake Pan—Improved	110
California—Population of	112
Calf Breeder—A handy	67
Camp Cooking	83
Candle Stick—A home-made	127
Candle Stick—To keep clean	114
Cane Seat—Easy way to clean	38
Canning Corn	101
Canvas—To make waterproof	21
Capsules—Easy way to take	95
Carpet Beater—A home made	49
Cement—To make waterproof	22
Chest—To strengthen the corners of	52
Chicken Gaps—To cure	40
Chimney—Salt in building	39
Chimney—A home-made chimney cleaner.....	16
Chimney—To cure a smoking	5
Chimney—To mend leaks around	45
Choking—A simple remedy for	95
Clock—To oil a	27
Clod Crusher—A garden	124
Clothespins—Home-made	19
Coat Hanger—A good	132
Coffee—To improve when making	6
Colorado—Population of	112
Connecticut—Population of	113
Constipation in Baby	95
Cork in Bottle—To keep out of way	99
Cork—To remove from bottle	96-125
Cork—To fit large bottle	8
Corn Sheller—A home-made	48
Cotton Chopper—A home-made	50
Cow—Remedy for choking	63
Cow—To drive a	71
Crows—To prevent from eating corn	68
Crutches—Home-made	96
Cushion—Filling for a	21
Curtains—To insert rod in	34
Cutter—Home-made buttonhole	10
Dehorning—How to dehorn calves	64
Delaware—Population of	113
Dents—Raising out of wood	30

Disappearing Nail—To drive	128
Dishes—To prevent breaking of	76
Disinfectant—Sugar as	16
District of Columbia—Population of	130
Doubletree—An improved	67
Drawer—A secret	138
Drench Stock—Easy way to	63
Drip Pan—For refrigerator	28
Drowned Person—To raise body of	98
Ear Eche—Remedy for	109
Eating Pigs—To prevent sow	70
Eggs—Easy way to preserve	27
Eggs—To preserve when broken	99
Eggs—To prevent from sticking	16
Electric Light—Shade for	32
Fabrics—To restore color	33
Fabrics—How to sew thin	14
Feed Bag—Home-made	65
Feed Box—Easy way to make	70
Feeding Stock—To prevent wasting of	107
Finger Marks—To remove from furniture	23
Fish—To remove scales from	15
Fish Hooks—Easy way to carry	119
Fixtures—To pull wire through bent	116
Flies—To get rid of	34
Florida—Population of	113
Flower Stand—A home-made	137
Fly Trap—A home-made	14
Fly Paper—To make	20
Food—Regarding scorched	31
Founder—To cure	71-74
Fount—A sanitary	139
Fountain Pen—A home-made	35
Fountain Pen—To clean	28
Funnel—Make a paper	22
Gate—Home-made on wheels	40
Gate—A self-closing	40
Gate—A garden	87
Garlic—To remove odor of	18
Gelatine—Things worth knowing about	18
Georgia—Population of	114
Glasses—To keep on nose	17

Glasses—To separate when stuck together -----	134
Gloves—To preserve canvas -----	20
Grease—To remove from paint -----	8
Grease—To remove from floor -----	28
Grease—To remove from silk -----	23
Grazing -----	66
Gun—Easy way to clean -----	12
Hams—Keeping flies off -----	17
Hammock—A home-made -----	56
Hawaii—Population of -----	132
Hawk and Owl Trap -----	106
Hay Stack—Hook for -----	69
Heating—To heat up-stairs room -----	35
Hen Nest—Cheap way to make -----	100
Hens—To keep out of garden -----	25
Hinge—To make door close -----	42
Hogs—Castrating large -----	61
Hog Cholera—A good remedy -----	61-62
Hogs—Easy way to load -----	52
Hog Trough—A home-made -----	62
Holder—Home-made Broom -----	8-36
Hoof Rot—To cure -----	65
Horse Colic—To cure -----	66-71
Horse Collar—How to fit -----	73
Horses—Good points about -----	69
Hose—A hose handle -----	135
Hose Holder—Home-made -----	71
Hose—To mend rubber -----	50
Hot Water Bag—How to mend -----	129
Ice Boxes—To remove odors from -----	29
Idaho—Population of -----	114
Illinois—Population of -----	115
Indiana—Population of -----	115
Ink Spots—To remove from linen -----	36
Interesting Facts -----	144
Interfering—To cure horses of -----	66
Iowa—Popultion of -----	116
Ironing Board—Ever-ready -----	79
Iron Rest—How to Mke -----	140
Ivory—The bleaching of -----	19
Jumping Fences—To prevent cows from -----	72
Kansas—Population of -----	116

Kentucky—Population of	117
Kicking Cow—Cure for	67
Kindling—Easy way to break	46
Kitchen Chair—An improved	122
Kitchen Convenience	89
Lamps—To prevent from smoking	20
Languages of the World	138
Lard—To purify	17
Leather Punch—A home-made	104
Level—A home-made	42
Lice—To kill on animals	68
Liniment—Good one for man or beast	100
Lock—A good drawer lock	85
Lock—A good window	29
Lock—Home-made window	20
Lock—Burglar proof	12
Louisiana—Population of	117
Maine—Population of	118
Malaria—Plant that prevents	56
Map—The largest in the world	145
Maryland—Population of	118
Massachusetts—Population of	118
Mattress—Straps on	78
Measure—Home-made bushel	7
Medical Suggestions for Emergencies	105
Medicine Dropper—A home-made	95
Medicine—Easy way to take dry	97
Mice—To get rid of	32
Mice—To keep away	18
Michigan—Population of	119
Mildew—To remove	23-25
Minnesota—Population of	119
Mississippi—Population of	119
Missouri—Population of	119
Moistener—Envelope and stamp	136
Mo'd—To prevent from books and ink	15
Mold—To prevent in safes	35
Mold—To remove from room	9
Monograms—To print on fruit	60
Montana—Population of	120
Nails—To drive in hard timber	44
Nebraska—Population of	120

Needles—Aid in threading	26
Needles—To bend	12
New Hampshire—Population of	121
New Jersey—Population of	121
New Mexico—Population of	121
New York—Population of	121
Neuralgia—To cure	99
Nevada—Population of	120
Nicknames of States	133
North Carolina—Population of	122
North Dakota—Population of	122
Nozzle—Home-made spray	49
Nut Cracker	112
Ocean Depths	140
Ohio—Population of	123
Oil—To pour out of can	14
Oil Painting—To remove stains or grease from	24
Oklahoma—Population of	123
Oldest Book—The worlds	137
Onions—To remove odor of	18
Opener—A home-made bottle	37
Opener—Fruit jar	5-11
Opener—Can	6
Oregon—Population of	123
Overturning Chair—To prevent baby	115
Paint—How to make cheap	54
Paint—To remove from clothing	30-37
Paint—To remove from glass	19-33
Paint—To remove smell of	31
Paint—To remove from wood	10
Parchment—To remove stains, iron rust or ink	24
Peas—How to brush	58
Pennsylvania—Population of	124
Pen Points—To prevent from corroding	74
Pianos—To keep in tune	33
Pigeon Hopper	91
Pin Cushion—A handy	142
Pipe—To thaw frozen	41
Plow Point—To keep out of ground	72
Plowshare—For alfalfa	43
Pockets—Home-made for spools	13
Poisons—To prevent the taking of	94

Poisons—Special directions in case -----	102
Pop Corn—Easy way to pop -----	144
Post—Repairing fence -----	53
Post Puller—A home-made -----	47
Potato Baker—A home-made -----	36
Pot Covers—To mend -----	131
Porto Rico—Population of -----	132
Preserves—To prevent molding of -----	29
Pulling Spikes—A handy tool -----	120
Pulley Blocks—Money well spent for pair of--	54
Rack—A home-made tool -----	58
Rake—A home-made -----	55
Reflector—For dark rooms -----	15
Rhode Island—Population of -----	124
Roaches—To get rid of -----	34
Rock—To remove a large -----	54
Rubber Boots—To dry -----	10
Rubbing Post—A good -----	72
Salt Lake—The great -----	136
Salve—A home-made -----	94-96
Saw—To prevent from falling -----	68
Scorch Stains—To remove -----	23
Scrape—Home-made shoe -----	30-35
Screws—To hold in soft wood -----	47
Screws—To prevent from working loose -----	141
Screws—Removing of -----	11
Sea Breeze—Imitation of -----	118
Seed—Planting early -----	133
Settee—A lawn -----	117
Sheep—To prevent the jumping of -----	93
Shelf—A home-made -----	31
Shoe Lace Tips—How to make -----	113
Shoes—Easy way to stretch -----	80
Sills—A protector from decay -----	45
Skirt Hanger—A home-made -----	81
Sleeping Bag -----	88
Snake Bites—To cure -----	97
Soap Shake—Home-made -----	18
Soles—Wooden for damp floors -----	34
South Carolina—Population of -----	124
South Dakota—Population of -----	125
Spade—An improved -----	54

Splinter—To remove from finger -----	97
Sprains—For -----	101
Square—To restore figures on -----	41
Squeezer—A home-made lemon -----	37
Stains—To remove fruit -----	23
Stains—To remove from silver -----	5
Stains—To remove vegetable from hands-----	38
Stamp—Easy way to make -----	24
States—Where four meet -----	141
State Capital of Texas -----	143
Steak—To make tender -----	13
Steel—To remove rust from -----	98
Stop—A good barn door -----	9
Stop—Door -----	9
Stoves—To light gasoline -----	31
Stoves—To mend cracks -----	11
Stringers—Step -----	70
Stump Puller—Home-made -----	44-51
Stumps—To remove -----	135
Swill Barrel—An improved -----	51
Swing—To make home-made -----	17
Table Linen—To hem -----	26
Tack Puller—Home-made -----	23
Talking Machine—To soften the tone of ----	7
Team Pulling—To make pull together-----	41
Telephone—To hear better over -----	121
Tennessee—Population of -----	125
Texas—Population of -----	126
Tin Ware—To clean -----	36
Toads—The value of -----	55
Tomato Arbor—A good -----	105
Tomatoes—To keep the year round -----	56
Tools—Made from buggy springs -----	47
Towel Roller— A home-made -----	26
Trace—To hold trace on -----	59
Trap—A novel mouse -----	22
Trees—To protect from borers -----	57
Trees—Transplanting of -----	57
Typewriter Desk—A home-made -----	73
Umbrella—Easy way to mend -----	6
Utah—Population of -----	127
Vellum—To remove stains from -----	24

Vermont—Population of -----	127
Veterinary Medicines -----	75-93
Virginia—Population of -----	128
Vise—Home-made -----	92-93
Wagon Tires—To keep tight -----	44
Wallpaper—To remove -----	13
Washington—Population of -----	129
Watermelons—To keep part of -----	18
Watermelons—To keep until Christmas -----	11
Warts—Ridding stock of -----	64
Wells—To remove foul air from -----	48
West Virginia—Population of -----	129
Whitewash—To make stick -----	49
Window—To lower a -----	77
Window—To prevent from rattling -----	21
Wire Netting—To stretch -----	82
Wire—To take up barbed -----	42
Wisconsin—Population of -----	130
Wonders of the Sea -----	142
Worms—Cure for in horses -----	63
Worms—To expel from hogs -----	63
Wrench—An emergency -----	38
Wrench—Home-made for turning pipe -----	53
Wyoming—Population of -----	130

CALENDAR-1917

JANUARY. JULY.

S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	1	2	3	4	5	6	1	2	3	4	5	6	7
7	8	9	10	11	12	13	8	9	10	11	12	13	14
14	15	16	17	18	19	20	15	16	17	18	19	20	21
21	22	23	24	25	26	27	22	23	24	25	26	27	28
28	29	30	31	..	..	..	29	30	31	..	..	..	..
..

FEBRUARY. AUGUST.

S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	1	2	3	4
4	5	6	7	8	9	10	5	6	7	8	9	10	11
11	12	13	14	15	16	17	12	13	14	15	16	17	18
18	19	20	21	22	23	24	19	20	21	22	23	24	25
25	26	27	28	..	..	..	26	27	28	29	30	31	..
..

MARCH. SEPTEMBER.

S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	1	2	3	..	..	..	..	..	..	1
4	5	6	7	8	9	10	2	3	4	5	6	7	8
11	12	13	14	15	16	17	9	10	11	12	13	14	15
18	19	20	21	22	23	24	16	17	18	19	20	21	22
25	26	27	28	29	30	31	23	24	25	26	27	28	29
..	..	..	..	..	..	..	30	..	..	..	..	..	..

APRIL. OCTOBER.

S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	1	2	3	4	5	6
8	9	10	11	12	13	14	7	8	9	10	11	12	13
15	16	17	18	19	20	21	14	15	16	17	18	19	20
22	23	24	25	26	27	28	21	22	23	24	25	26	27
29	30	..	..	..	..	..	28	29	30	31	..	..	..
..

MAY. NOVEMBER.

S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	1	2	3	4	5	..	..	..	..	1	2	3
6	7	8	9	10	11	12	4	5	6	7	8	9	10
13	14	15	16	17	18	19	11	12	13	14	15	16	17
20	21	22	23	24	25	26	18	19	20	21	22	23	24
27	28	29	30	31	..	..	25	26	27	28	29	30	..
..

JUNE. DECEMBER.

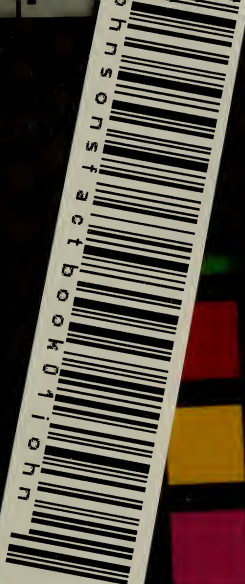
S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	..	..	..	1	2	..	..	..	..	..	..	1
3	4	5	6	7	8	9	2	3	4	5	6	7	8
10	11	12	13	14	15	16	9	10	11	12	13	14	15
17	18	19	20	21	22	23	16	17	18	19	20	21	22
24	25	26	27	28	29	30	23	24	25	26	27	28	29
..	..	..	..	..	..	..	30	31	..	..	..	..	..

LIBRARY OF CONGRESS



0 030 005 145 5

Johns Hopkins Factbook 011011



00300051455



LIBRARY OF CONGRESS



0 030 005 145 5

